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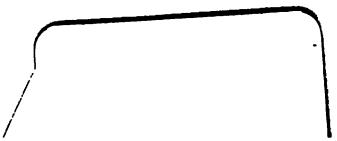

THE

# CHOLERA AT MALTA

IN 1837;

FROM THE ITALIAN OF GIUSEPPE STILON, M.D., &c., &c.

PHYSICIAN TO THE CHOLERA HOSPITAL IN VALLETTA.

BY

SETH B. WATSON, D.M.,

OF ST. JOHN'S COLLEGE, AND FORMERLY ONE OF THE PHYSICIANS OF THE HOSPITAL AT OXFORD.

TO WHICH IS PREFIXED

A LETTER

FROM

SIR JOHN STODDART, LL.D.

THEN CHIEF JUSTICE OF MALTA.

---

*Improvisa Lethi*
*Vis rapuit,* RAPIETQUE *Gentes.*

---

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TO

## DR. SETH B. WATSON.

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MY DEAR SIR,

As I resided many years at Malta, and was there during the whole time of the cholera in 1837, you desire to know my opinion of Dr. Stilon's pamphlet on that epidemic; and also whether I can give you any additional information of the circumstances which attended the course of the disease. I shall endeavour to satisfy you on both points.

I knew Dr. Stilon well, and had the highest opinion both of his abilities and of

his honourable and benevolent character: and greatly indeed do I lament to have to speak of them in the past tense; for since I left the island, he has terminated his earthly career—an irreparable loss, not only to his family and friends, but to his profession and to the public! He was a native of Calabria, but entered, at an early age, into the British service, in the medical department of the navy, in which he attained the rank of surgeon, and eventually settled in Malta, with the degree of M. D. as a physician. In that capacity he was employed by the governor, by Mr. Hookham Frere, and by many of the principal families of the place, my own included, and his reputation among all ranks was deservedly high for ability, zeal, and humanity. He was therefore, when the cholera broke out in the island, most properly chosen by the then governor, Sir Henry Bouverie, to take the direction of the Cholera Hospital in Valetta. Nobly indeed did he discharge that arduous duty, which, added to his extensive private practice, required and found

in him almost superhuman energy. If the result, estimated by the proportion of cures to cases, was less favourable than might have been hoped, and considerably so when compared with those in the naval and military hospitals, this is easily to be accounted for by causes, on which he has slightly touched in his pamphlet, and to which I shall presently advert more at large—causes which, far from implying in him any deficiency of skill or exertion, only serve to place in a stronger light his persevering energy in contending with and overcoming difficulties apparently insuperable.

So much for his public character; but I must not close this short tribute to the memory of a most excellent man, without mentioning, that in the course of my official duties, I had occasion to learn circumstances in his private conduct, which evinced extreme kindness of disposition, most active benevolence, and in serving others a total abnegation of self. Of the merits of his pamphlet, in a professional view, I cannot pretend to judge; I can only say, with the

utmost confidence, that implicit reliance may be placed on his statements of fact. He was of too candid and straightforward a mind to dress up, or colour a case, to make it suit a preconceived theory. He sought honestly for the truth, and honestly recorded the event of his search.

I proceed to your second question. I have had occasion to observe that the situation and circumstances of Malta are known so indistinctly in England, that you must excuse me, if my statements appear rather pedantically minute. The Island of Malta is in the line of its extreme length, running south-east and north-west, about eighteen British statute miles, and in its greatest breadth (crossing that line at right angles) about nine miles. It is indented, especially on the north-east side, with numerous bays and inlets, of which the most remarkable form the great harbour and the quarantine harbour, separated by a promontory, on which stand the city and strong fortress of Valetta; whilst on the east side of the great harbour are the three united cities of

Cospicua, Vittoriosa, and Senglea. The ancient capital of the island, Citta Vecchia, now comparatively deserted, stands on an elevation near the centre of the island, and to the westward of it are some hills a little higher, but none which can properly be called mountains. The greater part of the island is nearly plain, with gentle undulations. There is little foliage, or herbage, and no pools or running water, and consequently few spots troubled in any degree with *malaria*, the fertile cause of epidemics in most other warm countries. Opposite the north-west end of Malta, at a distance of three miles and a half, is the Island of Gozo, about ten miles long, by four and three-quarters broad; and between them intervenes the small Island of Cumino, about two miles long and one broad. Gozo is more hilly than Malta, but in other respects very similar: it is deemed, however, more healthy. These two islands (for Cumino has scarcely any inhabitants) contained, just before the breaking out of the cholera, a total population of 119,878 souls, viz., in

Malta, 103,344, and in Gozo, 16,534. Of the inhabitants of Malta, very near one-half were contained in Valetta, (with its suburb Floriana,) Cospicua, Vittoriosa, and Senglea, all which together may be considered as forming the capital of the island, the seat of government, of trade, and of the chief military force. Here consequently were, on the one hand, the best means of guarding against illness; and, on the other, the greatest temptations to excess, and the worst haunts of misery. The remaining portion of the inhabitants was spread among casals and villages, containing from five or six thousand souls to a few hundreds each. This rural population was chiefly employed in husbandry, living very simply, working hard, and the great majority of them wretchedly poor; and in all these particulars they were resembled by the people of Gozo. The various calculations of the area of the three islands differ very widely: that which appears to me to be upon the whole most correct, makes it about one hundred and eighteen and five-sixths square miles,

of which about one hundred square miles are capable of cultivation. The population is, therefore, far more dense than in any other part of Europe, being in 1837 nearly 1,200 persons to a cultivable square mile. This, and the other circumstances to which I have adverted, must be taken into account, when we speculate on the progress of an epidemic in such a country.

The cholera had begun to move from Asia into Europe so early as 1829. In that year, the late Sir John Malcolm predicted that it would make the whole tour of Europe, and from his experience of its slow and insidious progress, he thought it would not accomplish the whole of that course in less than eight years. The last year of this term had arrived in 1837. The cholera had visited Russia in 1830, and England in 1831: it had ravaged Marseilles in 1835, and had appeared in Naples and Sicily in the spring of 1837. Still the governing authorities of Malta had made no preparations for its reception. A flattering delusion prevailed with some, (which I for one

did not share,) that Malta being a small island, fifty miles distant from the nearest main land, this epidemic would be unable to cross the channel, or would pass by without touching the Maltese shores. On the 24th of May, the Malta Government Gazette, printed at that time under the absolute control of the public secretary, congratulated its readers on the freedom of the island "from *cholera*, plague, earthquakes, and the grippe," "though it had for a long time past been surrounded, and pretty nearly too, by one or other of these visitations." The very next day, however, a startling fact occurred. No less than forty of the crew of H. M. Steamer *Medea* were attacked with *influenza*. The disorder increased: several hundred men of the squadron became affected by it, as were some persons on shore. Still the editor "*hoped* that the complaint was *trivial*." But, alas! on the 9th of June several cases of undoubted *cholera* at once broke out in the *Ospizio*, an asylum containing about seven hundred and fifty aged and impotent per-

sons. This building was situated in a damp part of Floriana, a suburb of Valetta; and being near to the Protestant burying-ground, probably received from thence noxious inhalations. The disorder spread rapidly among the inmates; so that in ten days no less than two hundred of them had died. Still the Government Gazette writer argued that this circumstance "furnished no general ground of despondency to the rest of the population." The governor, however, soon became sensible of the gravity of the occurrence. His first step was to remove the whole establishment of the Ospizio to Fort Ricasoli, an insulated building, on an airy spot at the mouth of the harbour. Orders for that purpose were given on the 13th, but from some misunderstanding the unfortunate individuals were subjected to a very injurious delay in carrying those orders into effect. When they were at length fixed in the fort, a new difficulty presented itself. The deaths increasing rapidly, the ordinary gravediggers refused to perform that office. It became necessary to employ the con-

victs; but these men, finding themselves exempt in a great degree from control, used their temporary freedom for the perpetration of unbridled atrocities. Another unforeseen obstacle occurred. It was scarcely possible to obtain medical assistance for the sufferers. With one or two exceptions, (among whom was Dr. Arpa, whom I shall have occasion to mention more particularly hereafter,) the native Maltese physicians conceiving that the cholera was a kind of plague, and communicable by contact, absolutely refused to approach a cholera patient. I must not, however, be understood to impute to the medical gentlemen of Malta, on all occasions, either physical or moral cowardice. There have been times when they have exhibited calmness and courage in the last extremity of danger; and I cannot omit to mention the instance of the police physician at the time of the plague in 1813. This worthy man having exposed himself to infection, in the discharge of his duty, took the disease, which terminated fatally. An English surgeon of

my acquaintance was present at his dissolution; and to him the sufferer said, with the utmost coolness and resignation, "You see these black spots on my arm; they warn me of the near approach of death: in two hours I shall be no more." The backwardness of the Maltese physicians during the cholera arose less from timidity than from ignorance. Had the government, years, or even months previously, taken proper means to enlighten them on the nature of the disease, which was so manifestly approaching, they would doubtless have been as ready as Dr. Stilon himself was, to to combat the malady, when it first appeared.

On the 19th of June the governor adopted a measure, which might indeed have been more beneficially undertaken before the appearance of the epidemic, and in anticipation of its all but certain arrival; but which was (as the proverb says) "better late than never." He appointed a central committee of nine gentlemen, English and Maltese, for the supervision of cases of cholera, amongst

whom were the physicians of the Naval and Military Hospital, and of the Police. This committee immediately drew up a report containing many judicious suggestions, which either for want of means, or for other reasons, unfortunately remained in part without effect. They advised that a large and well-arranged *hospital* should be provided for each of the country districts; but the only hospital answering that description, that I heard of, on the civil establishment, was the Valetta Hospital, of which Dr. Stilon has so ably given the details in his valuable pamphlet. Indeed, if such hospitals had been opened throughout the island, it would have been difficult, if not impossible, to find medical men to perform the requisite duties, for the reason which I have before stated. The central committee next recommended the formation of *local committees* in all the casals, of which the members were to be approved by government. If this measure was anywhere carried into effect, I at least am not aware of any utility derived from its operation. The

central committee was invested by an ordinance of the government, with authority to issue orders, if confirmed by the governor, and with power to enforce those orders by compulsion. How far they availed themselves of the provisions of this ordinance I cannot pretend to say. They discharged with great zeal and regularity the duties imposed on them till their dissolution on the 26th of August; but it was understood that their suggestions were not always so readily attended to as might have been wished. On one very material point, however, the governor fully agreed with them; and that was in impressing on the public mind the doctrine that cholera is *not contagious*. In confirmation of this, they published the authoritative opinions of the physicians and surgeons of the hospitals of Paris. Various useful recommendations for guarding against the approach of the disease were also issued from time to time by the committee. Among these were the cleansing and whitewashing the houses in the *Manderaggio*, the filthiest part of Valetta, which was carried

into effect under the direction of the police. The governor set on foot a voluntary contribution for the relief of the poor during the prevalence of cholera. He headed the subscription himself, and was liberally seconded by all the wealthier part of the inhabitants, both English and Maltese. The relief, however, consisted chiefly in the distribution of soup, which, I am afraid, was in some cases rather injurious than beneficial, by disturbing the action of the digestive organs in persons not accustomed to such a nutriment. The governor, from an early period of the disease, made one regulation which, in my own opinion, was very judicious. He caused to be published daily a numerical list of new cases and deaths, which, while it prevented exaggerated alarm, served to keep public attention alive to the full extent of the danger.

The Gazette notices it as a "*provident* measure" on the part of his Excellency, that certain medical men had arrived from Gibraltar, by his invitation, on the 28th of July. On that day, however, the disease

had raged above seven weeks; it had carried off near three thousand victims, and was already on its decline; and the measure would surely have been more "provident" had it been adopted on the day of the first attack; in which case, the Gibraltar surgeons might have reached Malta by steamers, before a dozen lives had been lost, exclusive of the inmates of the Ospizio. After all, the great, I may almost say the only practical, measure of material benefit to the population, was the establishment of the Cholera Hospital in Valetta, and the placing at the head of it a man so skilful, and, above all, so energetic, zealous, and persevering, as Dr. Stilon. When I mention one good man, however, who was engaged in this great work, I must not forget another, whose self-devotion ought to render his memory dear to his countrymen, and to every friend of humanity. There was a Roman Catholic priest, a Maltese, named Teuma, who no sooner heard that there was a large hospital opened for the reception of cholera patients, many of whom

would infallibly die, than spurning the danger of contagion, in which most of his countrymen firmly believed, he took his bed with him into the hospital, and there remained, day and night, so long as the epidemic lasted; for the sole purpose of administering to the dying those sacraments, which smooth with them the awful entrance into the valley of the shadow of death. Whether this heroic man has since been recompensed by any earthly distinction, I know not; but surely he may expect the infinitely higher reward—"Well done, thou good and faithful servant! Enter thou into the joy of thy Lord!"

After speaking so freely as I have done of the public proceedings at Malta, in relation to the cholera, I should not advert to a private matter, in which I am myself concerned, but that I think a knowledge of the circumstances may be useful, in particular situations, even in England. On the west side of the quarantine harbour, in an airy situation, about a mile distant, by sea, from Valetta, there is a village named *Sliema*,

much resorted to for country lodgings by persons in easy circumstances from the city. In 1837, about thirty poor families resided there, who were employed in agriculture: the number of other inhabitants it was not easy to ascertain, as many of them were mere temporary lodgers; but taking all classes together, the average number of individuals, during the period in question, may be estimated at four hundred and fifty. Six or seven of the better class of residents, English and Maltese, formed in this village a voluntary committee. They began by establishing a night-boat, to transport any persons who might be attacked in the night to Valetta, either for conveyance to the hospital, or to obtain the advice of the best physicians there, as they might wish. They procured a *cataletto*, a sort of bier, on which patients are usually carried to hospitals, in serious cases; and as nobody chose to receive into a private house this melancholy vehicle, they built a small hut just large enough to contain it. They then proceeded to engage a physician, at a monthly salary,

in the village. By good fortune they succeeded in engaging the above-mentioned *Dr. Arpa*, who, though a Maltese, having pursued his medical studies at Naples, had more enlarged views than most of his countrymen, and was not alarmed at the contagious character ascribed to cholera. A house was taken for him in the centre of the village: it was properly supplied with medicines and utensils; at the door were fixed a night-bell and lamp, and near the latter a board, inscribed, "Advice and medicine gratis, at all hours, for the cholera." But the principal and most material stipulation was, *that the doctor should walk through the village morning and evening, inquire into the state of health of every family, and if any premonitory symptom appeared, should immediately apply to it the proper remedy.* With regard to the poor, the committee determined to relieve them, by giving, not soup, but bread, with a proportionate quantity of any kind of food *to which they were most accustomed;* only taking care that it should be digestible,

wholesome, and sufficient; and Dr. Arpa kindly undertook to superintend the distribution every morning. In an English gentleman's family, as the Maltese servants are usually kept on board wages, and mess together, as they think best; the master contributed something to their mess, to insure its being substantial and wholesome; and instead of the ordinary wine, which they drink mixed with water, and which by its acidity might have provoked diarrhœa, he issued daily to them a proper quantity of brandy and water ready mixed. After all these precautions for the body, the Maltese members of the committee, well knowing the anxiety of their countrymen for those last sacraments which they deem essential to the repose of the soul, applied to the bishop to make their little chapel a sacramental one, and appoint to it a duly qualified priest. A whole month elapsed before these objects could be attained; but at length a capuchin friar arrived, a man of much simplicity, mildness, and piety; and from that moment all the inhabitants of the

village looked without apprehension to the progress of the disease. Thus the committee obtained the two great ends it had in view; namely, to calm those apprehensions which so often enhance the danger of an epidemic; and to secure the earliest possible attention to symptoms easily counteracted in the outset, but rendered fatal by even a short neglect; and all this was done without any expense whatever to the government, by the voluntary contributions of the inhabitants.

Such being the circumstances of Malta, and such the means, public and private, adopted to deliver it from the dreadful scourge of an epidemic, which had ravaged so many countries, I come now to notice the results of the measures pursued. To render my observations on this head more easily intelligible, I subjoin four tabular statements, marked A. B. C. D. The first contains a statement of the deaths in the different cities, casals, and villages of Malta alone, from the 9th of June to the 2nd of September, in twelve columns, each

containing the deaths of a week, except the first, which comprehends twelve days, and the last only four. The second table contains the remaining deaths in Malta, and all the deaths in Gozo, (without distinction of casals, &c.,) till the termination of the epidemic on the 4th of October, and compares the whole number of deaths with the whole number of cases of attack. The third is a meteorological table of the state of the winds, and of the atmospheric temperature as indicated at its lowest and highest degree, each day, by Fahrenheit's thermometer. And the last table presents a comparative statement of the number of deaths occasioned by the plague of 1813, and those caused by the cholera of 1837. The reducing of statements of fact to a tabular form is doubtless of great use in facilitating the general comprehension of a subject; but as my old friend, the late Sir Humphrey Davy, once observed to me, they should be regarded at best as mere approximations to the exact truth. There will always be, in a given number of observations or experiments,

some difference in the careful attention to, or precise notation of the facts, some omission of minute circumstances in one case, or exaggeration of them in another. All that can reasonably be expected is that they should be conscientiously framed, with as much accuracy as the means possessed by those who draw them up will enable them to observe. This rule I have endeavoured to follow in framing the tables above mentioned; and the inferences which I draw from them will be found, I believe, pretty near the truth, with that fair allowance which the nature of the case demands.

I have mentioned that during the prevalence of the cholera, daily reports were published, by the governor's order, of the new cases of attack, and of the deaths, in all parts of the island, except the small village of Melleha, which was altogether free from attack. These reports, however, were only continued with the same minuteness till the 2nd of September, after which the disorder decreased so rapidly, that it was only

deemed necessary to state the numbers as applicable to the two islands of Malta and Gozo, without further distinction. It is perfectly clear from Appendix A., that with the exception of the Ospizio, the disease began in Malta with a small number of victims, gradually advanced to a much greater, and then gradually subsided. In twelve days, from June the 9th, there were but five deaths, in a week, from the 12th of July, seven hundred and seventy-four, and in four days, from the 30th of August, fifteen. And so it was in almost every separate district; for instance, in Senglea it rose from two to one hundred and four and declined to five; in Zeitun from one to seventy-eight and fell to six. When I say that it is perfectly clear that there was a gradual rise and a gradual fall, I do not mean to say that these figures exactly indicate the ratio of the variations in each district. It is impossible, at this distance of time, to ascertain how many of the sufferers, that died in the hospital of Valetta, may have been attacked elsewhere; and this circumstance precludes a strict

numerical accuracy of comparison; but of one point we may be certain, that there must have been a very marked and rapid increase, and a gradual declension in the deaths, and consequently in the intensity of the epidemic, in almost every district, and most obviously so in the instances above mentioned of Senglea and Zeitun.

This table, (A.,) too, seems pretty clearly to indicate, when compared with the map of Malta, that the cause of cholera, whatever it may be, does not depend either on personal contact, or on local proximity; for Birchircara and Balzan are within half a mile of each other, connected by the high road to Valletta, and the inhabitants are in daily communication. Yet in Balzan no death appears to have occurred till the week after the epidemic had reached its utmost height in the island, and the whole loss of lives was seven, while in Birchircara (a place indeed of much larger population) the deaths began in June, and the whole loss was one hundred and seventy-three. So Curmi lost one hundred and thirty-seven, Attard, about a mile dis-

tant, (and with a fourth of the population,) only eight. The table (A.) is framed so as to show at once (subject to the above remarks) the great or small number of deaths in each district, and by reference to table (C.) it will be seen, so far as the latter extends, that the deaths bore no assignable proportion to the population in the respective districts; for instance, Vittoriosa, with between four and five thousand inhabitants, lost one hundred and forty-five lives; Sliema, with a tenth of that population, only two. In point of fact, Sliema lost but one of its inhabitants, a lady who refused to submit to Dr. Arpa's medical treatment; the other death being that of a labourer who was accidentally employed on a field in this district, but belonged to Birchircara, and consequently had not the advantage of the distribution of food which was made to the poor of Sliema.

The table (B.) shows that there was in Gozo the same gradual rise and decline in the intensity of the epidemic as in Malta, viz., a rise from eight deaths in a week to

ninety-three, and a decline to seven. The proportional effect on the population of the two islands was, however, very different. The civil population of Malta being (as shown in table D.) 103,344, and the deaths 3,784, the proportional loss of life was one in about twenty-seven and one-third. In Gozo, on a population of 16,534, the deaths being 368, the proportion was only one in forty-four and eight-ninths. To what causes this difference may be ascribed I know not. Some difference of circumstances may be pointed out. Gozo was attacked twenty-seven days later than Malta. The island is smaller; and is generally esteemed more healthy. It has no large city or port, the seat of luxury, dissipation, and immorality, and the resort of mendicants and profligates of the lowest class. It has few soldiers and no sailors, except the native fishermen, and those regularly employed in the passage to and from Valetta. Though the majority of the inhabitants are poor, their exclusive occupation in agriculture, joined to their simple and regular habits of life, may perhaps

harden their constitutions against epidemic attacks. They are not so closely crowded together in their dwellings as is the case in the cities and larger casals of Malta. It is true that they had, during the cholera, little medical assistance; but in this respect they were not worse off than the inhabitants of most parts of Malta. There were indeed physicians in both islands, but physicians who would not come near a cholera patient. From one source of misery Gozo was free. None of the sufferers were thrust, at the last extremity, into a Cataletto, transported for miles through a broiling sun, and laid down at the hospital door in a dying state, as Dr. Stilon shows to have been more than once the case in Valletta.

Table C seems most clearly to prove that neither the direction of the wind, nor the temperature of the atmosphere, has anything whatever to do with the introduction, permanence, increase, or diminution of this remarkable malady. Of the winds which prevail at Malta, those which blow from the north and west are indisputably the most

refreshing, and in ordinary cases the healthiest: yet out of the one hundred and eighteen days that the disorder lasted, (omitting four, when there were calms, or variable airs,) the proportion of the more to the less salubrious winds was as seventy-one to forty-three: and in the very week, ending the 18th of July, when the deaths were at the highest, viz., eight hundred and three in the two islands, the winds ranged exclusively from north to north-west. The variations of temperature exercised as little influence on the intensity of the disease. During the same week, when the deaths were at eight hundred and three, the temperature ranged only from seventy-four to eighty-four; whereas, in the week ending the 15th of September, it ranged from seventy-eight to eighty-six, and the deaths were only fifty-two. Nor was even the last-mentioned height of temperature extraordinary in Malta; for on the 5th of September, 1828, it reached the point of ninety-one.

I have added the table D. rather as a matter of curiosity than as throwing any

important light on the subject of the cholera. The two diseases were not only essentially distinct in their operation on the human frame, but they differed as widely in all the circumstances which marked their course at Malta. The plague was generally believed, on very strong evidence, to have been introduced into the island by some infected goods, and to have been communicated by contact alone. The cholera was, on equally good grounds, believed to have arisen from the state of the atmosphere, and not to have been communicable by mere contact. The former seized the patient without warning: the latter was preceded by premonitory symptoms, always manageable if attended to in due time. The actual loss of life was spread in the plague over nearly nine months, and amounted to 4,668 deaths: the cholera, which lasted little more than three months, destroyed 4,152 of the civil inhabitants. In the first case, the loss was about four and a quarter per cent. of the population, in the latter not

quite three and a half. The consequential injury inflicted on the island by the plague was incalculably greater than that occasioned by the cholera: it broke up the commerce of the island, impoverished the inhabitants, burthened the government with expense, and obliged it to resort to a loan at an interest of twelve per cent.; none of which circumstances attended the cholera. To extirpate the plague demanded all the energy of so able and resolute a man as Governor Maitland: the cholera ceased of itself, without necessitating a resort to any violent or costly measures on the part of the government for its suppression. In the interval between these two visitations, an increase of nearly ten thousand souls had taken place in the general population of the islands; and is presumable that this augmentation bore somewhat of a like proportion in each district. I know indeed that this was not exactly the case in 1827, on which I have founded the approximative estimates for 1813 and 1827; but these cannot be far

from the truth, on the whole, the excess in some instances being compensated by the deficiency in others.

You will not expect me to discuss the different methods pursued for the alleviation or cure of cholera in Malta. That would require a degree of scientific information which I do not possess. I may, however, observe on the open and obvious inferences to be drawn from a comparison of the number of cases which occurred with that of the deaths which ensued.

In the civil hospital in Valletta, the cases were five hundred and forty-eight, and the deaths three hundred and six, or about fifty-six per cent.

In Malta at large, the cases which are stated to have occurred in the civil population were 7,672, and the deaths 3,784, or about forty-nine and a quarter per cent.

In Gozo, the cases were eight hundred and eighteen and the deaths three hundred and sixty-eight, or about forty-five per cent.

In the Naval Hospital, the cases were

sixty and the deaths twenty, or thirty-three and a quarter per cent.

In the Military Hospital, the cases were three hundred and three and the deaths seventy-one, not quite twenty-three and a half per cent.

Now these statements alone, however plain on the face of them, can lead to no distinct judgment on the merit of the treatment followed in the respective classes referred to. Dr. Stilon has clearly shown that it was impossible not to expect numerous deaths in the Civil Hospital, where many patients were brought in at the point of death, and expired soon after admission; and the only wonder is that he was enabled to rescue so many as forty-four sufferers out of one hundred in states so desperate. Probably this could not have been done by means less powerful than those which he employed; for he appears to have administered to two of his patients in successive doses *a thousand grains of calomel each!* and both of them recovered.

In Malta and Gozo generally, it would be

vain to look for anything like a systematic mode of treatment. Nearly one-half of those who were attacked fell victims to the disease; the others generally owed their recovery to the strength of their constitutions, or to the comparative purity of the atmosphere in which they dwelt, and which perhaps the Gozetan enjoyed in greater purity than the Maltese.

Both the Naval and Military Hospitals were under the care of most able, zealous, and humane physicians. The Naval Hospital stands in a most airy situation, admirably built, well ventilated, and kept as clean and sweet as any private house can be. Whether there was any difference in the practice followed there from that of the Military Hospital I know not. Probably the cases sent to the former were of a less favourable nature than those received by the latter, which may account for the greater proportion of deaths in the one establishment than in the other.

One circumstance relating to the military patients I must not omit to mention. The detachment of artillery suffered, in relation

to their numbers, more than the other part of the garrison: and yet I was informed by their colonel that some of the victims were among the finest, and most temperate young men in the corps. I infer from this circumstance, that their liability to the disease was owing to the damp, confined, or ill-ventilated state of their barracks. Coupling this fact with that of the first appearance of the disease in the Ospizio, an ill-placed and crowded building, I am led to conclude that the cholera virus, or miasma, whatsoever it may be, is rendered much more intense in damp places without sufficient ventilation, and where the air is already corrupted by the respiration of many persons in the same apartment by night as well as by day. Indeed, I do not see how we can explain the other remarkable fact, that while the military, who all live in barracks at Malta, furnished 303 cases, and seventy-one deaths, there occurred among the other English inhabitants a very few serious cases, and only two or three deaths, and even these latter were of individuals of intemperate

habits, or under the weakening influence of terror.

After all, I am deeply convinced, that *preventive measures* are far the most important that can be taken during the prevalence of such an epidemic as the cholera, of which at Malta almost every person felt at times some premonitory symptoms. Though at Sliema, as I have said, there were only two deaths, and indeed only two cases, which Dr. Arpa thought of sufficient gravity to report them to the government, there were at least forty, which he arrested in early stages, and which therefore gave the individuals comparatively little trouble. Every one of these might, and most of them perhaps would, have led to collapse, with a great probability of death, but for the system of *constant medical surveillance*, which the worthy physician carried into effect. I am aware that it would be morally impossible to practise such a system in a vast metropolis like London; but there are many country parishes in Great Britain, where, with the countenance and aid of the resident

gentry, and especially of the clergyman, an active physician or surgeon would have no difficulty whatever, in preventing the cholera from producing any fatal effect.

I am, my dear Sir,

Your faithful friend,

JOHN STODDART.

*Brompton Square, October,* 1848.

# TABLE A.

*Weekly Deaths by Cholera in Malta from June 9th to September 2nd,* 1837.

| | | | | | | | | | | | | | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valletta | .. | 32 | 186 | 193 | 179 | 144 | 71 | 20 | 20 | 8 | 6 | 2 | 761 |
| Ospizio, &c. | 282 | 158 | 44 | 9 | 2 | .. | .. | .. | .. | .. | .. | .. | 445 |
| Senglea | .. | 2 | 19 | 66 | 104 | 74 | 51 | 11 | 7 | 11 | 5 | .. | 350 |
| Cospicua | .. | 1 | 13 | 47 | 48 | 78 | 40 | 30 | 20 | 7 | 6 | 1 | 291 |
| Zeiten | .. | 1 | 19 | 37 | 78 | 64 | 32 | 21 | 6 | 4 | 6 | .. | 268 |
| Zebbug | .. | 1 | 13 | 31 | 53 | 37 | 42 | 22 | 8 | 7 | 5 | 1 | 220 |
| Lia | .. | .. | 1 | 7 | 26 | 15 | 22 | 15 | 9 | 12 | 9 | .. | 176 |
| Birchircara | .. | 6 | 15 | 24 | 39 | 43 | 29 | 10 | 4 | 2 | 1 | .. | 173 |
| Floriana | 3 | 7 | 23 | 33 | 21 | 18 | 20 | 16 | 6 | 2 | 12 | 5 | 166 |
| Citta Vecchia | .. | .. | 1 | 1 | 15 | 31 | 25 | 26 | 15 | 25 | 13 | 2 | 154 |
| Vittoriosa | .. | 4 | 10 | 25 | 26 | 35 | 29 | 15 | 4 | 2 | 3 | .. | 145 |
| Curmi | .. | .. | 2 | 10 | 38 | 37 | 31 | 13 | 4 | 1 | 1 | .. | 137 |
| Zurrico | .. | .. | .. | 7 | 25 | 25 | 18 | 13 | 7 | 1 | .. | .. | 96 |
| Zabbar | .. | 1 | 2 | 8 | 25 | 21 | 16 | 6 | 4 | 2 | 1 | .. | 86 |
| Siggeui | .. | .. | 1 | 15 | 28 | 14 | 8 | 2 | 1 | 2 | .. | .. | 71 |
| Asciak | .. | .. | 5 | 10 | 16 | 11 | 6 | 1 | .. | 1 | .. | .. | 50 |
| Musta | .. | .. | .. | .. | .. | 2 | 6 | 9 | 7 | 3 | 3 | 2 | 32 |
| Tarscien | .. | .. | 1 | 6 | 6 | 6 | 5 | 4 | 1 | .. | .. | .. | 29 |
| Nasciar | .. | .. | .. | 8 | 3 | 2 | 4 | 3 | 3 | 1 | 2 | 1 | 27 |
| Luca | .. | .. | .. | 2 | 7 | 8 | 1 | .. | .. | 1 | .. | .. | 19 |
| Gudia | .. | .. | .. | 7 | 1 | 2 | 2 | 2 | .. | .. | .. | .. | 14 |
| Micabiba | .. | .. | .. | 2 | 3 | 4 | 2 | .. | 1 | 1 | 1 | .. | 14 |
| Gargur | .. | .. | .. | .. | 1 | 2 | 4 | 4 | .. | 2 | .. | .. | |
| The Lazaret, &c. | 2 | 1 | 2 | 2 | 2 | 2 | 1 | .. | .. | .. | .. | .. | 13 |
| Pietà | .. | 1 | 1 | 2 | 2 | 1 | 1 | .. | .. | .. | .. | .. | 12 |
| Attard | .. | .. | .. | 1 | .. | 2 | 1 | 1 | 2 | 1 | .. | .. | 8 |
| Balzan | .. | .. | .. | .. | .. | 2 | .. | 1 | .. | 3 | 1 | .. | 8 |
| San Giuliano | .. | .. | .. | 1 | 3 | 1 | 1 | .. | .. | .. | .. | .. | 7 |
| Crendi | .. | .. | .. | .. | 1 | .. | .. | .. | .. | .. | 2 | .. | 6 |
| Chircop | .. | .. | .. | .. | .. | 1 | .. | 1 | .. | .. | .. | .. | 3 |
| Safi | .. | .. | .. | 1 | .. | 1 | .. | .. | .. | .. | .. | .. | 2 |
| Sliema | .. | .. | 1 | .. | 1 | .. | .. | .. | .. | .. | .. | .. | 2 |
| Milit. Hospit. | .. | 4 | 13 | 24 | 13 | 14 | 2 | .. | 1 | .. | .. | .. | 71 |
| Naval Hospit. | .. | 1 | 5 | 1 | 8 | 1 | .. | .. | .. | .. | 3 | 1 | 20 |
| Tot. per Week | *237 | 222 | 276 | 580 | 774 | 698 | 462 | 246 | 130 | 99 | 80 | †15 | 3,819 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |

* 12 days. † 4 days.

# TABLE B.

*Deaths by Cholera in Malta and Gozo.*

| | | |
|---|---|---|
| 1. In Malta, from June the 9th to September the 2nd, 1837, (sup. App. A.) | | 3,819 |
| ,, from September 3rd to September 5th | | 12 |
| ,, ,, ,, ,, 12th | | 16 |
| ,, ,, ,, ,, 19th | | 15 |
| | | 43 |
| 2. In Gozo, from July the 5th to July the 12th | | 8 |
| 19th | | 29 |
| 26th | | 93 |
| August 2nd | | 57 |
| ,, 9th | | 34 |
| ,, 16th | | 17 |
| ,, 23rd | | 35 |
| ,, 30th | | 40 |
| September 6th | | 25 |
| ,, 11th | | 10 |
| ,, 18th | | 13 |
| | | 361 |
| 3. In Malta and Gozo from September 18th to 27th | | 13 |
| to October 4th | | 7 |
| | | 20 |
| Total deaths from June 9th to October the 4th | | 4,243 |
| Deduct for Military and Naval | | 91 |
| Deaths of the civil population | | 4,152 |
| Deaths in Malta | | 3,784 |
| Deaths in Gozo | | 368 |
| The total number of cases was | | 8,853 |
| viz. in Malta | | 8,035 |
| viz. in Gozo | | 818 |
| Deduct cases in the Military Hospital | | 303 |
| ,, Naval Hospital | | 60 |
| Cases of the civil population | | 8,490 |
| viz. in Malta | | 7,672 |
| viz. in Gozo | | 818 |

# TABLE C.

## METEOROLOGICAL TABLE,

*During the prevalence of the Cholera at Malta*, 1837.

| JUNE. | | JULY. | | AUGUST. | | SEPTEMBER. | | OCTOBER. | |
|---|---|---|---|---|---|---|---|---|---|
| id. | Therm. | Wind. | Therm. | Wind. | Therm. | Wind. | Therm. | Wind. | Therm. |
| | | N. | 74·79 | WNW. | 77·80 | S. | 83·86 | ESE. | 71·74 |
| | | SE. | 73·79 | NE. | 78·81 | S. | 83·85 | N. | 70·73 |
| | | NNE. | 76·81 | ESE. | 76·80 | S. | 82·86 | SE. | 69·71 |
| | | Variab. | 75·82 | N. | 75·79 | S. | 81·85 | ENE. | 67·71 |
| | | SSW. | 78·83 | W. | 77·80 | NNW. | 78·33 | | |
| | | W. | 78·84 | NW. | 76·81 | ESE. | 79·84 | | |
| | | N. | 75·83 | NNW. | 77·82 | WNW. | 79.85 | | |
| | | E. | 76·82 | NW. | 78·82 | SW. | 72·76 | | |
| | 66·74 | SE. | 78·82 | E. | 78·83 | NW. | 75·77 | | |
| V | 67·78 | S. | 78·83 | E. | 79·83 | WNW. | 73.76 | | |
| | 69·79 | S. | 76·81 | WSW. | 77·81 | WSW. | 76·77 | | |
| | 76·80 | N. | 79·84 | Calm. | 77·82 | SW. | 76·78 | | |
| | 75·80 | NW | 74·82 | NNE. | 78·83 | SW. | 79·82 | | |
| E. | 76·82 | NNW. | 74·79 | N. | 78.83 | SW. | 77·80 | | |
| | 77·81 | NW. | 75·88 | E. | 79·84 | NW. | 74·79 | | |
| | 76·84 | N. | 74·78 | E. | 79·83 | N. | 75·79 | | |
| W | 76·83 | NNW. | 75·79 | SW. | 79·84 | NE. | 75·78 | | |
| | 78·85 | NW. | 77·80 | NW. | 76·83 | N. | 74·77 | | |
| W. | 76·84 | WNW. | 76·81 | ESE. | 77·81 | N. | 74·77 | | |
| | 77·82 | NW. | 74·79 | NE. | 79·82 | WSW. | 74·78 | | |
| NE. | 75·79 | WNW. | 74·77 | N. | 77·84 | WSW. | 74·77 | | |
| E. | 75·78 | W. | 73·78 | N. | 78·84 | SSE. | 73·78 | | |
| RE. | 70·76 | NW. | 73 77 | Calm | 76·82 | ENE. | 73·77 | | |
| | 70·75 | E. | 73·76 | W. | 77·83 | SSE. | 72·76 | | |
| NW. | 72·75 | W. | 74·77 | WNW. | 78·83 | NNW. | 72·74 | | |
| E. | 71·76 | NNW. | 75·78 | NW. | 76·81 | W. | 71·75 | | |
| | 72·77 | NNE. | 75·77 | NW. | 78·82 | WNW. | 71·75 | | |
| E. | 72·77 | E. | 76·78 | W. | 77·82 | N. | 73·76 | | |
| NE. | 74·78 | E. | 77·79 | WNW. | 78·84 | S. | 74·76 | | |
| NW. | 76·80 | ESE. | 77·80 | SW. | 78·83 | NNE. | 72·75 | | |
| | | Calm | 76·81 | S. | 81·85 | | | | |

# TABLE D.

*Comparative effect of the Plague of* 1813 *and the Cholera of* 1837 *in Malta and Gozo.*

| 18 Casals, &c. | Population, 1813. | Deaths by Plague. | Population, 1837. | Deaths by Cholera. |
|---|---|---|---|---|
| Cospicua City .. | 9,303 | 12 | 10,293 | 291 |
| Zeitun ..... | 5,287 | 11 | 5,848 | 268 |
| Birchircara .... | 5,275 | 281 | 5,835 | 173 |
| Zebbug ..... | 4,690 | 691 | 5,190 | 220 |
| Vittoriosa City.. | 4,095 | 33 | 4,530 | 145 |
| Curmi..... | 3,849 | 642 | 4,339 | 137 |
| Musta..... | 3,583 | 32 | 3,963 | 32 |
| Zurrico ..... | 3,299 | 6 | 3,649 | 96 |
| Zabbar ..... | 3,269 | 44 | 3,616 | 86 |
| Siggeui ..... | 3,140 | 9 | 3,473 | 71 |
| Nasciar ..... | 2,815 | 9 | 3,113 | 27 |
| Luca ..... | 1,306 | 42 | 1,446 | 19 |
| Lia ..... | 1,138 | 4 | 1,258 | 176 |
| Tarscien..... | 986 | 1 | 1,091 | 29 |
| Gudia..... | 961 | 6 | 1,063 | 14 |
| Attard ..... | 861 | 2 | 952 | 8 |
| Micabiba ..... | 758 | 7 | 838 | 14 |
| Sliema Village .. | 250 | 3 | 450 | 2 |
| Malta..... | 94,258 | 4,572 | 103,344 | 3,784 |
| Gozo ..... | 15,243 | 96 | 16,534 | 368 |
| | 109,501 | 4,668 | 119,878 | 4,152 |

N.B. The population here stated for Malta and Gozo in 1837 is taken from the official return in June, 1837, just before the breaking out of the cholera. All the other statements of population here made are approximative, with reference to former returns.

In describing the symptoms which characterize cholera in its different stages, I thought it rather advisable to study brevity, than to indulge in a lengthened commentary, which, after all, would produce only probable hypotheses, and furnish matter for unsatisfactory dispute.

According to the report of the central committee on cholera, dated 22nd of July, 1837, it appears that the number of cholera patients admitted into the Military Hospital at Malta, from the 17th of June to the 18th of July inclusive, and who were all treated with calomel in large doses, amounted to 269, and of all these the deaths, notwithstanding some pre-existing indisposition, were only 58.

In the civil hospital, which was provisionally erected for cholera patients, in the

building belonging to the normal school, 548 individuals were received, but in these the effect of the calomel was not entirely so advantageous as had been hoped; but it could hardly have been so, if we take into consideration the following circumstances. It is well known how strong an antipathy generally exists among the common people, against the hard necessity of applying to a hospital for the cure of any disease. To this prejudice, at the breaking out of the epidemic in Malta, another and much greater prejudice was unfortunately added. A rumour prevailed that the object of transporting the sufferers to the hospital, was to cause their death by a poison called calomel; this wicked calumny, suited only to minds the most obscure, and malignant, prevailed so far with the lower classes, that in the early part of the disease, few cholera patients were brought to the civil hospital until almost expiring; and in fact some of them actually died on their way thither. Many also of those who arrived in a state capable of cure, perished through an invin-

cible obstinacy, in refusing every succour of the medical art.

Again, of the patients who were sent to the hospital, many were of a very advanced age ; almost all of them were in the most miserable condition, ill-clothed, and worse fed. Often, too, they came from a distance in the country, and most of them, in a journey of several hours, were necessarily exposed to the burning rays of the sun, notwithstanding that all possible care was taken to preserve them from this inconvenience: from all these causes, no doubt, the progress of the malady was greatly increased.

In the military hospital the case was very different; the patients sent thither were, for the most part, individuals suffering only from the earliest stage of the disorder; they did not partake the prejudices, which had so lamentable an effect among the country people; they readily submitted to any treatment which their medical advisers directed; they were brought from places very near the hospital itself; their age in no case exceeded 50 years; all of them had been well

clothed and supplied with abundant food, consequently they were in every sense more capable of resisting the deadly impression of the poisonous miasma.

In my own private practice I attended 259 persons in different stages of the malady; of these 36 were in severe rigor, and 14 of them died, a reaction having occurred to six, which took the typhoid form. Out of the 223 in whom the disorder had not yet reached the state of rigor, there was only one to whom I found it necessary to administer five scruples of calomel, in order to arrest the disorder; to a few others I gave two scruples, but in almost all the cases a single scruple was sufficient to arrest the malady.

Although it had been feared that the calomel, even after having cured the epidemic, might produce consequences injurious to the animal economy, I can positively assert that of all those individuals, who under my care were cured by means of calomel, no one has to this day suffered the least inconvenience from the effects of that

remedy; on the contrary, some of them enjoy a better state of health than they did previous to the attack; and it is a circumstance particularly remarkable, that of the immense number of cholera patients who were cured by calomel, not more than 40 underwent salivation, and even of these very few suffered it to a serious degree.

## CHAPTER I.

### PHYSICAL CAUSES PREDISPOSING TO CHOLERA.

MANY authors have written on the cholera, but though I have studied most of them very carefully, I have not been able to meet with any one who has fully satisfied my mind, as to the primary cause, which directly generates so formidable a disease. And as nature has many recondite secrets, we may reasonably doubt, whether we shall ever succeed in withdrawing the veil, which hides from us so desirable a discovery.

Some are of opinion that the cause is to be attributed to a malignant fluid, which wafted by a current of the atmosphere with

which it is mixed, produces this disorder in those countries, and lands, which it reaches. Strongly convinced of this opinion, they will not allow that the disease may be communicated from one person to another by contact.

The natural philosophers, who treat of aerial fluids, furnish us only with hypothetical notions, which lead to little else than intricate and doubtful discussion. Hence it is that we are still unable to say, whether a particular condition of the atmosphere either alone, or combined with other circumstances, is the efficient cause in the case of many epidemic maladies so different from each other, as, for instance, scarlatina, small pox, influenza, measles, and the whole train of miasmatic diseases; or whether there is a peculiar combination acting as the cause of each one.

Mr. Wilkinson, in his elements of galvanism, holds it for certain, that the electrical state of the atmosphere exercises a powerful influence on the human body; from the experiments which have been made, he main-

tains, that the deficiency of electric fluid produces that remarkable relaxation of strength, which causes that general debility of the human functions which is experienced in countries where the sirocco prevails. Mr. Orton goes on to establish the doctrine, that the cholera has, as its remote cause, an insufficient quantity of positive electricity of the atmosphere. The arguments which he adduces in support of this opinion, though not altogether without weight, cannot be said to resolve entirely the serious doubt in controversy; without dwelling further on this point, it would be sufficient to refer my readers to page 237 of his work: for the sake of brevity I shall also pass over several similar theories which, as I think, do not amount to a clear ascertainment of the remote cause which produces cholera—but that it is derived from some principle existing in the air, (whatever that may be,) and which is circumscribed by certain atmospheric strata, has been sensibly demonstrated, by the evidence of the following among many other cases, which have occurred.

Lieutenant Macillwain, of the British navy, in a conversation with me on the cholera, assured me that when he was serving in 1832 on board the frigate Liffy, which was then stationed in India, and was anchored a few miles from the shore, the cholera broke out in the ship. Information having been transmitted to the admiral, he gave orders that the frigate should immediately proceed to sea, and this command being promptly obeyed, and the frigate consequently being removed to a distance from the seat of the epidemic, the progress of the disease was immediately stopped, and no new cases broke out; but of those who had been attacked in the infected locality, ten died in the course of a very few hours.

Miss Wallis, the daughter of an officer of the 45th regiment of the line, was proceeding, in the year 1832, from Trincomalee to Madras on board a vessel, which fell into a current of air infected with cholera, which in a short time caused the death of several of the crew; the captain, in his anxiety to preserve the persons on board, thought it

best to alter the course of his vessel to an opposite direction; the expedient proved effective, for the disease immediately ceased. But as he could not reach his destination without passing again through the seas he had quitted, he no sooner arrived at his former latitude, than the crew were again attacked by the same disease, and a great part of those who fell ill the second time, were individuals who had not been attacked on the former occasion.

The Rodney, a British man-of-war, was assailed by the cholera when at a short distance from Malta, where the disorder then prevailed; wishing to escape from the evil, the commander ditected his course towards Sicily, but the disease still continuing, either because the navigation pursued the same atmospheric strata which was impregnated with the choleraic miasma, or from some other cause as yet unknown, the vessel finally returned to Malta in order to land the patients for the Naval Hospital. Departing again, and directing its course towards Sardinia, it was observed that at a

certain distance to the westward of Malta, the malady made no further progress, and those sailors on board, who had been attacked after leaving the port began to get better.

The Bellerophon, another man-of-war belonging to the English squadron, stationed in the Mediterranean, on its return from a cruize on the coast of Barbary, approached Malta with the crew in perfect health; but the commander, finding that the island was suffering from cholera, and being anxious to guard against the infection, caused the vessel to anchor at the mouth of the harbour, and kept it there in most rigorous quarantine: useless precaution! the malady quickly broke out in the vessel.

These events, so uniform in effect, and so strong in their evidence, confirm at once the reasonableness of the opinion, that the cholera takes its rise from a malignant fluid existing in the atmosphere, and at the same time show, that the disease has not the property of being transferred from one person to another by contact alone.

The truth cannot be better known than by considering the effects which produce, in my opinion, indisputable evidence, so as to compel me to dissent altogether from the doctrine of those, who regard cholera as a contagious malady: if they had examined the effects which manifested themselves in Malta, and had conducted the examination on those simple principles, which usually lead to a reasonable conclusion, as to the origin of any given malady, which presumably is brought from another country, they would certainly have been compelled to acknowledge, in spite of themselves, that the Asiatic cholera, however it might be thought contagious in its nature, could not be communicated by mere contact. Before they admitted a doctrine founded only on probabilities and vain conjectures, they should rather have observed, that in this island all vessels proceeding from countries infected, or in the neighbourhood of infection, are universally subjected to a rigorous quarantine; the quarantine is performed in places altogether separated from inhabited spots,

and that it is constantly watched by the most accurate observation, that persons are severely prohibited from approaching these places, and that those under quarantine are not even permitted to speak to others, except at a certain fixed distance, and under the watchful observation of guards. The gentlemen who rely on conjecture, might also have easily recalled to their memory, that notwithstanding there were, at the beginning of June, 1837, in the ports of this island many vessels, which had arrived from countries suffering under severe cholera, their crews did not exhibit the least symptoms of that malady, and yet for the greater precaution, they were compelled to undergo that quarantine, which the careful foresight of the sanitary committee had respectively decreed to them, and which they had not accomplished, till some days after the cholera had already exhibited itself in the island.

And even if any of these vessels had on board persons, who after their arrival exhibited symptoms of cholera, which, thank

God! did not happen, the first who must have received the fatal contagion, would uudoubtedly have been those, who acted as quarantine guardians, and others would from them have received the disease progressively by contact,—but none of these rational inferences were verified in fact.

Evidence of this kind, strongly circumstantial, and resting upon facts publicly known, ought, one would think, to have disabused the contagionists of their hypothetical notions regarding the Asiatic cholera. But deep-rooted prejudices are not easily eradicated from obstinate minds, more especially when they have taken the form of a system. As soon as it was known that the cholera had broken out in a kind of almshouse called the "Ospizio de' Poveri," a large insulated building in the suburb of Floriana, to which few persons resorted except the public officers, and where the inmates were mostly predisposed to disease by age, and consequently were the first victims, the contagionists loudly declared that the malady had been intro-

duced into that place, by means of some articles susceptible of infection. Shameless fabrication! thus they excited a most alarming fear in the minds of that large part of the population least cultivated by education; so that they would have shortly broken up all the bonds of relationship and society, if they had not been actively opposed by those, who with the clear arguments of experience, day by day refuted these fables.

In further support of the arguments, by which I endeavoured to dissipate the alarms of these poor people, I feel it a duty to mention several observations, which occurred to me from time to time, as the cholera became more aggravated, and which finally confirmed beyond a doubt, in my mind, the opinions which I had formed from speculation and study. All the cholera patients, from the moment they were admitted into the temporary hospital, established, as I have before observed, in the building belonging to the normal school, were treated with the most intimate familiarity, and yet

out of sixty individuals, who were employed in the service of that establishment, only six were attacked, four of whom were persons notoriously addicted to the excessive use of spirituous liquors. The attendants gathered together the clothes of the cholera patients, and laying them in a place covered with cloth, reposed or slept on them when not upon duty. The medico-chirurgical assistants readily bled those patients who required it, and it often happened that when the blood did not flow freely, I myself bled the individual in the other arm. The cæsarean operation, when necessary, in case of death, was not omitted, nor did I hesitate, when the circumstances required it, to give the female patients assistance in case of miscarriage. The post-mortem examinations were not performed at first for want of the necessary accommodation; but when the hospital was transferred to another building, the house of industry, many examinations were made; in one of which, for the sake of a more minute inspection, I persevered for three whole hours, and on that

occasion the gentleman who assisted me in laying open the smaller intestines, which were found full of a whitish pulpy matter, wounded one of his fingers, and yet there followed neither to him, nor to any of us the least symptom of contagious cholera. Many other experiments of the same kind, which in Malta were spoken of as extraordinary novelties, were also practised in the military and naval hospitals, with the same success as in various foreign countries.

## CHAPTER II.

### PHYSIOLOGICAL CAUSES PREDISPOSING TO CHOLERA.

WHEN the epidemical cholera prevails in a country, it is generally considered that the causes predisposing to it are not only the external agents, but the differences of age, of sex, and of natural temperament, extreme poverty, continued hard labour, and the various professions, and arts, which require toilsome exercise, excite in an individual such a state of body, as renders him or her more liable to receive infection.

Several writers have laboured to establish the opinion, that adults are the most predisposed, but my observations showed

that the advanced periods of life, were by no means less exempt from it; for in the hospital above named, out of a total of 548, there were 156 between the ages of 60 and 90 years, and of these the greater part, as will be seen by the annexed tables, died. In those cases, the reaction passed into encephalitis and apoplexy.

In regard to sex, it may be taken as certain that females are more predisposed to it than males; this appears clearly from the numbers contained in the official reports of the police physician.

There is no doubt, but that among the different temperaments natural to the human body, the bilious is that which most predisposes to cholera. In fact, the greater part of the choleraic patients, who were admitted to the hospital, were of that temperament; however, several were received who were of a scrofulous habit, and these were generally found the most difficult of cure.

Vehement and ill-regulated passions of the mind, such as terror, rage, anger, and that alarming fear, which often seizes on

persons at the first appearance of this terrible malady, are moral agents which easily dispose the individual to be affected by it. It is thought that any labours or duties, which require excessive exercise, as they tend to debilitate the body, dispose it also to receive cholera. This opinion, which is very reasonable, is also demonstrated by the great number of the patients, who belonged to the class of the very indigent, or of those employed in very laborious occupations.

Finally, some think that certain professions occasion a susceptibility to cholera; for my part, however, after the most diligent observations that I have been able to make, I am of opinion that in pursuing any profession with proper moderation, we shall not incur a predisposition to the malady, unless the locality is either too humid, insufficiently ventilated, or not kept with due cleanliness.

## CHAPTER III.

### PATHOLOGICAL CAUSES PREDISPOSING TO CHOLERA.

HAVING reviewed the physical and physiological cause of cholera, I proceed to consider the pathological causes,—a knowledge of which is of no less importance with reference to the malady in question. We know that by means of pathology, we enter into the most minute investigation of the irregular functions of the human body, and consequently to the clearest possible perception of its sufferings, of their differences, occasions, and effects. In order to judge well of any disease, we must diligently examine the constitution of the patient, mea-

suring it attentively in its relation to the normal and abnormal state. To give a mere passing thought to this examination, which can never be too careful, would be, in fact, to encounter a thousand inevitable, most serious, and most dangerous errors, in the choice of the method to be followed in treating the disease. To know how to stop the advance of an approaching infirmity, how to remove it when formed, how to diminish its effects, to overcome some of its symptoms, before we can entirely remove the disease, is a kind of knowledge which, if well analysed, leads, by the most certain, and secure steps to the discovery of those remedies, which the most skilful practitioners, after long and most accurate experience, would indicate as the most conducive to the ends desired.

After a full consideration of these manifest truths, I have been enabled to satisfy myself that the principal pathological causes of cholera were such as follow: viz. all acute or chemical inflammations of the mucous membrane lining the stomach and in

testines—the presence of worms in the intestines—the effect produced by drastic purges, or by acids organic or inorganic, used in such a quantity as to keep up a continual irritation in the prima via, hypochondriasis, or any of those particular modifications of the gastro enteric viscera, which often remain after hepatitis, or chronic pulmonary disease.

The examination of these pathological causes tending to cholera, has not been mentioned with a view to impress those, who are not affected by them with the idea that they may therefore consider themselves exempt from its danger. For this would be a flattering but fallacious comfort. My intention was rather to advise those, who find themselves subject to these inconveniences, to be the more cautious in their mode of living, especially when that particular condition of the atmosphere prevails, which is believed to generate cholera.

## CHAPTER IV.

### PATHOLOGY OF CHOLERA.

THE different accounts, which have hitherto been published of the post-mortem examinations of cholera patients, are so uniform in their statements, as to leave no doubt that the principal seat of the malady, is in the mucous membrane of the stomach and intestines.

(The author, after having cited the statements of the sectiones cadaverum performed in India by Messrs. Orton, Annesley, Kelly, Burrell, Whyte, and Craw; those in Europe by Mr. Mackintosh, by the French surgeons, and by the Italian anatomists, proceeds to

mention such as were executed at Malta, as follows) : —

The " necroscopic " observations, which result from the post-mortem examinations of the different bodies of those who died of cholera in the civil, and military hospitals of Malta, exhibited nearly all of them, the same pathological appearance. I abstain for the sake of brevity, from transcribing all the particulars registered, and shall give the description of one only, which may serve as a model for the understanding of all the others, and will be sufficient to show that the pathological state of those, who died of cholera in this country, was the same as resulted from the autopsia in other places.

Maria Cassar, 60 years of age, died in the state of rigor, 20 hours after the attack, and was dissected 14 hours after her death.

*External appearances.*

The skin of the arms, hands, legs, and feet, was of a livid colour, with blackish spots on various parts of the superficies of the body.

*Cavity of the Skull.*

The cavity of the skull, overflowed with a bloody fluid, coming from the incisions of the membrane made in opening the skull. In detaching the encephalon from the cranium, and in dividing the medulla oblongata, a quantity of very transparent serum escaped from the opening of the vertebral column; on examining the external surface of the encephalon, the arteries and veins were found turgid with black blood resembling liquid pitch; the interior was in like manner gorged with blood of the same quality; the ventricles were almost full of bloody serum; the plexus choroïdes was nearly black. The interior surface of the fornix was of a reddish hue, the substance of the cerebellum was tougher than usual, and its colour was dotted with black, grumous spots, which arose from the vessels which had been divided.

*The Thorax.*

The right pleuro pulmonalis adhered to the costal pleura; this was evidently occasioned by an old morbid affection of the lungs; the superficies of the lungs were of a yellowish white colour, smeared with an unctuous liquid; the blood-vessels were replete with black blood, which presented to the view a black arborescence, very prominent; the parenchyma of this organ was gorged, and in making incisions into it, a quantity of thick black blood issued. The right auricle of the heart and the corresponding ventricle were full of curdled blood having thick fibrine in the centre, which prolonged itself to the interior of the pulmonary artery; the left ventricle was in the natural state, containing black blood, but liquid; the aorta, the veins, and coronary arteries were full of black blood.

*Abdomen.*

The mucous lining of the cardiac aperture

of the stomach was so soft that it could be with the greatest ease detached from the muscular tunic; this viscus and the small intestines were of a rose colour on the external surface; the mucous membrane of the duodenum was reduced to a pulpy substance, which could be separated easily with a slight movement of the finger, that of the jejunum of the same nature, exhibited on various points spots of ecchymosis, and particularly in the duodenum, which contained seeds of melon and earth-worms; the large intestines were injected, and were of a reddish brown colour, their mucous membrane greatly relaxed and easily detached; the transverse colon was full of gas; the liver was in its natural state, but its vessels, like those of all the other organs, was turgid with black blood; the gall bladder was full of bile, very black and dense; the pancreas was in its natural state. The spleen was soft and flabby, and its external surface was of a blue colour. The parenchyma was macerated, the bladder was void

of urine, and wrinkled up towards the symphysis of the pubes. The neurilema of the pneumo gastric and of the great sympathetic was injected, and of a brown colour nearly the whole of its extent.

## CHAPTER V.

### OF THE PREMONITORY SYMPTOMS OF CHOLERA.

THE above-described appearances being derived merely from post-mortem examinations, were not sufficient to lead to an adequate conclusion in respect to the true seat of the pathological condition of cholera. I think, therefore, that we cannot come to such a conclusion with the greatest possible probability of accuracy, without adding those circumstances; which are learnt by means of a sensation of uneasiness in the præcordial region: from disturbance in the stomach and intestines, from a disagreeable

bitterness in the mouth, from the continual rumbling in the abdomen—symptoms which were felt by almost all the inhabitants of countries where the cholera prevailed. The knowledge of these, added to that of the other symptoms which manifested themselves in individuals, after the cholera had developed itself, suffice pretty well, when considered together, to furnish reasonable conjectures; for holding it as certain that the virus which the cholera engenders, obtains primarily, or secondarily its power in the stomach and intestines; from no other principle, than from such a virulent impression on those organs, could so many and such various morbid phenomena be produced, as were observed in the course of this fatal disease. To convince ourselves the more of this truth, the knowledge of the following symptoms will be sufficient.

*Symptoms of the first stage.*

The quality of these, varies according to individual temperament, idiosyncracy, or other particular predispositions. In some

persons, this disorder was preceded by a feeling of languor, a dryness of the palms of the hands, and the soles of the feet, frequent eructations, accompanied with a sense of fulness of the stomach, and by slight colic. In other persons it was preceded by nausea, fulness of the lower stomach, followed by pains, continued desire to evacuate, and painful heat in the præcordial region. Some persons there were in whom the first symptoms were only cold shiverings over the whole surface of the body, connected with sensations of terror, and with noise in the intestines; others, again, were only premonished by a singular sense of anxiety in the stomach, by pains intense, though of short duration, in the abdomen, by diarrhœa, at first, of a natural colour, sometimes bilious, or greenish, but in its progress, white, like water slightly tinged with milk, or by weak pains in the head, and frequently by tinnitus aurium; all these observations are collected from accounts *nearly uniform*, which were published in Nuremberg, Moscow, Edinburgh,

and other countries, and which agreed with the observations, which I had the melancholy opportunity of making here in Malta. Now if these symptoms, which at first sight would seem to be of slight importance, were disregarded by any individual in a country visited by the cholera, they certainly would lead in a short time to the second stage, and so become almost incurable and hopeless.

To what eventual evil did such a thoughtlessness lead! How many fewer victims would not the cholera have destroyed, if the doctrine of its being contagious had not been spread through the public mind! This opinion, alarming to those who had blindly embraced it, induced them to bear in injudicious silence the approaches of the evil, which might then have been very easily overcome. It is now an indisputable rule, established by all modern practitioners of great reputation, that the cholera is of easy cure, whenever a physician is immediately consulted on the premonitory symptoms; and, on the other

hand, this is almost always incurable if these symptoms are followed by others more violent, which characterize it as having passed into the second stage.

*Symptoms in the second stage.*

This stage, which is also commonly called the stage of collapse or rigor, never occurred, as far as my observations extended in this island, unless the diarrhœa had previously manifested itself for some time. The duration of this profuse evacuation, differed according to the different constitutions of the persons attacked. In some cases it was observed, that before the second stage came on, the individuals had suffered diarrhœa for as much as twenty days; whilst, in other cases, it had lasted only a few hours: the danger in this period was generally in the direct ratio of the greater, or less evacuation of the liquid fæces.

The symptoms which showed that the cholera had passed to the second stage were these,—the skin began at the extre-

mities to assume a livid colour; this colour sometimes soon spread over the whole surface of the body, and sometimes was confined to the extremities, which appeared always wrinkled and withered; the colour of the nails became blue; there were also cases in which the surface of the body, or of some particular portions of it, was marked by white spots on a dark blue ground; in these instances the malady was almost always fatal. The whole circumference of the body, except the anterior part of the trunk, was generally cold, and bedewed with a light sweat, very cold and unctuous, presenting to the touch a disagreeable sensation, like that which is felt in handling frogs taken out of water; the smell exhaled by this sweat was very nauseous, and impressed itself so strongly on the memory, that whoever had once handled persons attacked with cholera in this stage, was easily able, from this circumstance alone, without any other examination, to distinguish the malady in any person really suffering from it.

Notwithstanding the skin of the cholera patients was extremely cold, they were yet unwilling to bear any warm bodies touching them; on the contrary, they preferred stretching themselves on the stone pavement, naked, to lying covered in bed; the countenance was much depressed, haggard, and drawn; the forehead was abundantly covered with cold sweat; the eyes were glassy, and very deeply sunken, and surrounded with a halo of a livid colour, very characteristic of cholera; the eyelids half closed, the nose sharp, the lips of a dark violet; tingling in the ears; the tongue generally white, always cold, drawn into a round form, and its edges of a red colour.

The thirst of these patients was so great and constant, that it was impossible to quench it by frequent imbibition; the voice became so weak, hoarse, and, as it were, extinguishing itself in the glottis, that it was almost impossible to distinguish the patient's words.

The matter vomited was white, exactly similar to the dejections in colour; it

took place without any effort of the patient to expel it; and oftentimes both the vomit and the intestinal evacuations occurred with great vehemence at the same moment.

Even though the evacuations in the first stage had been fæculent, in the second stage, however, they became watery and very like rice-water, or water mixed with a small quantity of milk, and still more offensive to the smell, than the sweat above mentioned. These were the characters of the evacuations observed in the majority of cases in the second stage; still there were some instances, in which the evacuations resembled water something turbid, and containing small flakes, such as have been previously mentioned; in others, they were slighty tinged with blood, blackish, or like the crust of red wine; sometimes lumbricales, and sometimes grains of hardened fæces.

There was a great and often irresistible tenesmus, sometimes accompanied with pains of the abdomen, and sometimes with a sense of burning in the anus. The quan-

tity of liquid lost at one time, varied according to the constitution of the patient, and the intensity of the attack; in some, the evacuations were accompanied with a remarkable quantity of gas; with the vomit was generally felt a great burning in the epigastrium, which formed a symptom so remarkable in this malady, and is commonly called the præcordial cingulum.

The secretion of urine was entirely suspended, and yet a continued and increasing desire to make water was felt; the pulse at the beginning was rapid, and very weak; in the majority of cases, however, it was thready, in others, it was entirely suppressed in one arm, and scarcely distinguishable in the other, or altogether without motion in either arm; notwithstanding that the action of the heart was so rapid, and comparatively so strong, that it seemed as if it wished to free itself, from the black blood it received from the veins: as the malady progressed, the action of this organ gradually diminished, until its entire cessation.

The blood which was drawn from cholera patients by phlebotomy, flowed with the greatest difficulty, and was thick, black, and deprived of the natural appearance, which it has in the normal state, when, if left to itself, it remains semi-fluid, and separates into the crassamentum and serum. In some cases the circulation was so slow, that if you pressed your finger on any subcutaneous vein, you observed for some time the vacuum occasioned by the pressure. In the beginning the respiration, though weak, was nevertheless natural, but in the progress of the malady it became difficult and oppressed. This was the effect of the quantity of blood, which having been deprived of a great part of its serum, inasmuch as that substance was evacuated from the mouth, and intestines, could not, therefore, circulate in the lungs, except with great slowness, and consequently became engorged there, so as not only to compress the small air-vessels, but to close also the minute branches of the bronchi; such a disturbance of the natural operations must

no doubt have impeded the ingress, and egress of the portion of air, necessary to oxygenate the blood.

The cramps which generally accompanied the cholera in this stage, were of all symptoms the most remarkable; they took place in different parts of the body, but particularly in the muscles of the extremities, superior and inferior, and still more observably in the muscles of the gastric region. The palms of the hand, the soles of the feet, and the flexors of the fingers and toes, sometimes also in the thorax.

When the progress of the malady had reached this state, the patients were much afflicted, and disquieted, continually turning themselves from one side to the other in the bed; nevertheless, in the midst of all this pain, the intellectual faculties were but little weakened, and the patient was generally able to give a clear account of everything he felt, or that was passing around him.

Although the patients in this stage, were apparently in a state of great weakness, and seemed quite incapable of voluntary

motion, nevertheless some of them before death exhibited strong convulsions.

If all the symptoms above mentioned, continued obstinately in the same degree, death invariably followed, and the cure was always found to be impossible, if the patient could not pass from this state to another, which leads to the third stage of the disease.

*Third stage, or state of reaction.*

In the state of reaction, the skin, from having been livid, began to return toward its natural colour; the surface of the body, from having been entirely cold, became gradually warmer, and the perspiration, from being cold, fetid, and unctuous, became warm, lost its fætor, and reassumed its natural state; the countenance was more animated, the dark circle around the eyes gradually disappeared, the lips and cheeks reassumed their natural colour, the tongue became clearer, and from having been round and cold, was warm and dilated; the thirst diminished, the voice became stronger, the vomit ceased, the diarrhœa was less

frequent, and the evacuations, instead of being quite watery, showed a consistence, and a colour tending towards green. The abdominal pain diminished, the secretion of urine began to show itself, but very slowly, the pulse was stronger and fuller, the respiration was no longer difficult, but easy and natural; the sleep, which in the former stage had been entirely suspended, now returned, and became placid and tranquil, and the cramps entirely ceased.

Such were the symptoms, which were generally observed in the state of reaction, but in many instances the event was not so fortunate; for when we thought that the malady was on the eve of cessation, suddenly a new train of symptoms presented itself, which showed that the patient was still in great danger.

In such cases the warmth of the body increased beyond its natural degree, communicating to the touch a particular and disagreeable sensation; the pulse became full, often manifesting all the symptoms, which characterize typhus. The conjunc-

tiva was injected, the strength prostrated, the tongue dry, and red; tremor in the limbs, difficulty of answering, continued delirium, which terminated in lethargy, and so in death; in others, the secretion, as it increased, took the form of encephalitis; in these patients was observed great headache, increased heat, pupils sometimes contracted, and sometimes dilated, furious delirium, propensity to sleep, contraction in the flexors, muscles, &c., &c. If to the encephalitis was added meningitis, then besides the symptoms above described, there were almost always convulsions.

Again, if the reaction took the form of gastro-enteritis, it began with simple nausea or vomit, then diarrhœa, the substance of the evacuations being bilious, mixed frequently with blood; the pulse small, and frequent; the heat augmented, the face red, the conjunctiva tinged with yellow, the tongue covered with a yellow fur, and red at the edges; burning thirst; abdominal pains; difficult respiration; palpitation of the heart; these symptoms corresponded in

degree to the greater or less violence of the attack, and to the individual constitution; we must not omit to observe that sometimes when the symptoms of rigor seemed to cease, and a slight reaction to take place, followed by some revival of the former strength, from whence it might have been thought that the patient was out of danger, nevertheless, on a sudden, the pulse began to fail, the vomit to reappear, together with the evacuations peculiar to cholera. The blue colour manifested itself, and finally such a debility took place as to lead to the death of the patients.

## CHAPTER VI.

### OBSERVATIONS ON THE MOST REMARKABLE SYMPTOMS OF CHOLERA.

As diarrhœa was in Malta, the primary and most remarkable symptom of cholera, we must begin from that point our observations.

The symptoms of the cholera patients, who were received in the hospital at the normal schools, before the other symptoms of the second stage presented themselves, were always preceded for a greater or less length of time by diarrhœa; some of those patients, when asked how long they had suffered it, answered from fifteen to twenty

days, whilst others had felt it but a few hours before; but after having taken indigestible food, at first they felt slight pains in the abdomen, and other symptoms which characterize indigestion; these were followed by diarrhœa, which, being neglected, had reduced them to the state in which they were. Others said that they had not suffered for any length of time, but that the excretion of watery matter in that short period had been very copious.

We learnt that in the cases of all those, who had suffered the watery diarrhœa, in consequence of feeding on figs, melons, pumpkins, apricots, and some of them on fish—more especially fried—the diarrhœa increased so rapidly as to produce in a very short time all the symptoms indicating the state of rigor; in these cases the quantity of liquid ejected above, and below, was so abundant, that it was difficult to understand how it could have been supplied; the individuals so circumstanced, exhibited a body in a short time so faded, and transformed, that a man young and athletic looked like a

withered, and failing old man; all this inclines me to believe that so sudden a metamorphosis, should be attributed to the rapid loss of so copious a quantity of the serous part of the blood.

*Cingulum præcordiale.*

The stomach, and small intestines, and more particularly the duodenum, being much affected, communicated by the vicinity of the parts to the cæliac and solar plexus a greater or less degree of irritation, which, added to the pain that the affection of these organs produced, constituted that continued sense of pressure which is known by the name of cingulum præcordiale.

*Vomit.*

The vomit, another symptom which accompanies cholera, did not always present itself, in the first stage of the malady, but it never failed to appear in the second; and it may be laid down as certain, that when this symptom supervened with any degree of activity, the state of collapse was quickly

afterwards manifested. Whether it was that the cholera virus, by its elective faculty, acted on the exhalants, or on the mucous follicles, or on both at the same time, it is evident that an irregular function manifested itself throughout the gastro-enteric mucous membrane, from whence was derived that immoderate ejection of the serous part of the blood, which was thrown out by the patients in the vomit.

It was observed, that all medicines of a stimulating nature, whenever they were introduced into the stomach, almost always occasioned vomiting.

### *Circulation of Blood.*

As the serous part of the blood was thus diminished, it followed that the globular part remaining of the same quality as before, this fluid consequently became thicker, which impeded the circulation in such a manner as necessarily to cause a want of nutrition, innervation, and healthy secretions.

### *The Urine.*

The blood having become thick, so that it could not well insinuate itself into the capillary vessels, and consequently could not produce the composition of the several parts, it inevitably caused a suspension of the secretions, and the innervation. Therefore it happened that in persons attacked by cholera, when they reached the stage of rigor, the secretion of urine ceased. Nevertheless, the patients, although the bladder was entirely empty, felt a continued and painful desire to make water, which sometimes we were able to calm by the introduction of a catheter into that organ.

### *Cramps.*

The cramps were observed in the state of rigor generally, but not in all cases; their force was very various, for in some persons they consisted only in slight contractions, but in others they were so violent as to resemble the paroxysms of tetanus. The cramps in a special manner attacked the

superior, and inferior extremities, nor was the trunk altogether spared; in grave cases, which soon terminated in death, the cramps accompanied the alvine evacuations; however, there were some cases in which very violent and acute cramps took place together with the evacuations, and yet the patients recovered.

Among the causes which produced cramps, may be reckoned the irregular action of the nervous centres—some gastro-enteric irritation, or some particular pathological state of the disordered intestines; the irregular innervation appeared to be occasioned, by the diminished nutrition of the great sympathetic, or by some irritation in that nerve, which disturbing its organic motion, rendered it incapable of exercising its functions properly. The irritation of the stomach, and bowels, may have been caused by some irritating stimulant, which operating on them, disturbed their action.

To prove that an irregular innervation, and intestinal affections usually produce cramps, the following instances may be ad-

duced. When sufficient blood is taken from an individual to produce syncope, it is observed that if the person be placed vertically, cramps immediately take place with more or less violence, according to his particular susceptibility.

A patient of mine being troubled by a tænia, I, in order to deliver him from so troublesome an inmate, prescribed for him a decoction of the root of the pomegranate; after he had taken it for some days, he obtained from it the relief which I had expected; but wishing to ascertain his case more perfectly, I recommended him to use the same decoction a few days longer, but my prescription could not be employed, for whenever he drank it, he was immediately attacked with violent cramps in the extremities.

A few years ago I prescribed to a patient of mine suffering under bronchitis, a solution of tartar emetice, which produced grave intestinal irritation, accompanied by alvine evacuations, and at the same time, with strong cramps not only in the extremities,

but also in the muscles of the trunk, to overcome which it was necessary for me to recur to the expedient of full doses of morphine.

Another patient of mine was attacked by cramps in the lower limbs whenever an accumulation of fæcal matter took place in the intestinal tube. Knowing the cause, he had recourse to a purgative, but its action increasing the irritation, contributed to the violence of the cramp; when the action of the purgative, however, ceased, the cramps altogether disappeared, and did not return, till a new accumulation of fæcal matter was formed.

There is no doubt but that the cholera virus acting primarily, or secondarily on the mucous membrane of the stomach and bowels, must be deemed the occasion of a more or less intense irritation, which, combined with the other symptoms before mentioned, is the cause, which produces the cramps.

*The Cholera Countenance.*

The appearance of the face in cholera patients was so marked that I may almost say that the diagnosis of the malady might be determined by that appearance alone,—a certain drawing down of the features, a dark circle surrounding the eye, which was sunk deep in its orbit, a glassy appearance of the cornea, the eyelids half closed, the nose pointed, and the cheeks dried up, were the signs in the countenance of patients, which indicated cholera. We must believe that these symptoms were derived from the greater or less loss of serum in the blood, occasioned by the vomit and the diarrhœa.

*Cyanotic appearance.*

The cyanosis or blue tint of the skin is a remarkable symptom of this malady, and was common to almost all the persons in this disease, who had recourse to the hospital, as well as to many others in my private practice; as to the cause which produces this colour, it seems to me that as the

circulation of the blood became slow, and the arterial blood, for want of a perfect sanguification, was converted into a colour nearly similar to venous, the capillary vessels of the skin, being injected with such blood, must necessarily present a more or less livid appearance, beginning with those processes which are most distant from the centre.

*Diminution of Heat.*

As physiologists are not agreed as to the origin of animal heat, it is somewhat difficult to determine accurately, the true cause of its deficiency on the surface of the body of a cholera patient. Dr. Crawford and his followers think that the arterial blood has a greater capacity for caloric, than the venous blood, and that the former only differs from the latter in possessing a less quantity of carbon; they, therefore, in explaining the calorification, say that the venous blood coming as it were into immediate contact with the atmospheric air, and the oxygen of the air combining with the carbon of this

blood, a carbonic acid is produced, and thus the venous blood becomes arterial, and inasmuch as the arterial has a greater capacity for caloric, therefore that which developes itself while the oxygen combines with the carbon, is immediately absorbed by it, and transported by means of the circulation, to the various parts of the body.

The chemical physiologists embrace the same theory, though with considerable modification. In consequence of the experiments of Mr. Edwards, who having caused various animals to respire in gas altogether deprived of oxygen, observed that a great quantity of carbonic acid was then formed, they found themselves constrained to admit, that the inspired air was absorbed by the blood, and transported to the capillary vessels, in which the oxygen combining with the carbon forms the carbonic acid; and from this union a quantity of caloric developes itself in the parts where it is necessary. The carbonic acid thus formed, unites with the blood, to which it communicates the dark colour, and from arterial it thus

becomes venous, then being transported by the veins again to the lungs, it gives out the carbonic acid, and appropriates to itself fresh air.

Others say, that the venous blood in the act of respiration becomes changed into arterial by appropriating to itself the oxygen alone contained in the atmospheric air, and that afterwards passing into the parenchyma of the different organs, it is transmuted from liquid to solid, in order to contribute to nutrition, and by such a change of state developes a considerable quantity of caloric, which maintains our temperature at a greater or less degree of elevation, even though we should be in a temperature less than our own. If this theory were correct, the calorification should necessarily augment itself, in the direct ratio of the quantity of oxygen, which combines with the blood. This circumstance, however, is contradicted by not a few facts, amongst which we may reckon that, which happens in those diseases of the lungs, when the greater part of that viscus is found to be so disorganized,

as to admit only a very small quantity of air into the air-vessels, and yet the heat of the individual is greatly increased, and at a certain period of the disease, may be said to be intermittent. It has often happened to me to attend persons affected with consumption, who before their death were, so to speak, burnt up with heat, and yet after death, on their dissection, the lungs were found entirely destroyed, so that not merely a small quantity, but the least possible quantity of oxygen could unite with the blood; and although it may be said that a slight portion of the organ remaining intact might be sufficient to perform sanguification, it certainly must have been incapable of producing so great an augmentation of heat.

Sir B. Brodie, observing that the calorification is not effected in a paralyzed limb, or under certain states of the mind, or where there exists any diminution of innervation, has inferred that the calorification is produced solely by the nervous influence.

It would be foreign to my purpose to

expatiate further on the various theories of the production of animal heat. I therefore confine myself to saying that it takes place in the capillary vessels, but cannot be produced without arterial blood and nervous influence.

In the cholera, in consequence of the thickness of the blood, the circulation in the lungs is so slow that it prevents the formation of a perfect hæmatosis, (vide page 1,) consequently the arterial blood being deficient, there follows a want of nutrition in the parts, and consequently a defect of innervation of vital force and heat; we may also add in relation to this subject, that the stopping of the blood in the internal vessels, in consequence of the pathological state of the stomach and intestines in cholera, produces not only a want of heat on the surface of the body, but a sense of internal heat, of which the patients without intermission complain.

*Cold Sweats.*

In almost all serious maladies in the

stomach, and intestines, the skin is observed to be covered by a cold sweat; if we wish to have a certain proof of this, we have only to prescribe to an individual a strong dose of tartar-emetic, or a purgative which acts on these organs; we should then immediately perceive the surface of the patient's body to exude a large quantity of cold sweat. Now as the disease of cholera causes an excessive disturbance of the gastro-enteric passages, we may confidently affirm that the cold sweat of cholera is occasioned by the same cause.

*Thirst.*

The thirst, which is a most constant symptom of cholera, and is so great and ardent that draughts of water seem scarcely to lessen it, most of the patients were so much tormented with it that they desired to have constantly in their mouths pieces of ice; there is no doubt, that the above-described state of excitement in which the stomach and intestines continued, and the want of the serous part of the blood, occa-

sioned both by the excessive fluid ejection, and diminished absorption, was the cause of this symptom.

*Diminished action of the Nervous System.*

When the stage of rigor had reached a high degree, it was observed that the action of the nervous system in the patients, gradually diminished; in this state they exhibited a general lassitude; they seemed to care for nothing, and to be insensible to all that passed around; nevertheless, whenever any questions were put to them, they did not hesitate to give, though with some difficulty, appropriate answers; from this it is clearly to be believed, that the activity of the nervous system, both in consequence of the action of the cholera virus, and a want of nutrition, occasioned by the causes above set forth, was greatly deteriorated, and consequently a diminution of its functions ensued.

## CHAPTER VII.

### OF THE PRESUMED CAUSE OF CHOLERA EXISTING IN THE AIR.

SINCE the cause, and origin of cholera form subjects of great controversy among medical writers, and since they who seem to deserve most credit, maintain that it exists in, and is communicated by, the air, in which a miasmatic virus exists, though as yet it cannot be properly named, or defined, we must not omit to examine at least the instrumentality, by which this virus is introduced into the system, and the manner in which it acts, when so introduced, on the living tissues.

We know that there are only four ways

in which a virus can attack the animal economy,—just when it is in contact with the surface of the body,—and in this case the medium through which it acts is the skin. The second is when, being mixed with the air, it insinuates itself into the body, and then the easiest mode is that of respiration, but also through the pores of the skin; the third is of the digestive tube, and this happens, when it is swallowed in the food, or drink, and then it is imbibed substantially; the last is, when it makes an impression on the tissues, by means of a disruption of continuity.

Doctors Addison, and Morgan, think that the different kinds of virus, when they enter into the current of the circulation, exercise their action on these nerves, which are distributed on the internal membrane of the blood-vessels, that after this first impression they lose altogether their injurious nature, which is communicated to the nerves, and passes from them to the brain, whence it is reflected on other organs, which are thereby affected in a secondary manner.

But this opinion has not obtained the common suffrage; that which is more generally embraced is, that certain kinds of virus introduced into the circulation pass on with it unchanged, or but slightly modified, to the particular organ, on which, by their proper quality, they have the specific power of acting.

In support of this theory, there concur many experiments, of which, for the sake of brevity, I shall mention only the following. If we observe various substances which are received into the torrent of the circulation, we see them combined with the different secretions of the body; again, others are perceived to have had only their elements separated, and those particles of their composition, which are of a virulent character remain, as injurious as they were, previously to their decomposition. There are also some substances which, after having circulated, together with the mass of the blood, through the animal economy, have the faculty of fixing themselves for some time in a particular tissue; this happens to the

[illegible] which attaches itself to the [illegible] of those animals who feed on [illegible]. From these sensible effects we may [illegible] conclude that the different tissues [illegible] animal economy, on which different [illegible] virus act, are of a nature pre[illegible] to receive the impressions of certain [illegible] which come in contact with them. But it may be asked, are all parts of the animal economy subject to the impression of the same virus, or rather different kinds of virus, which have the property of affecting this part rather than another.

To properly answer these questions, we must [illegible] what physiology, and pathology [illegible] the different parts of our body. In these researches we learn that the [illegible] are affected by stimuli peculiar to them. The retina is not acted upon [illegible] the undulations of sound, nor the [illegible] by the rays of light; again, [illegible] contained in the bladder, and [illegible] the intestine, cause no [illegible] to the parts which contain them. [illegible] are poisons cause these tis-

sues should communicate to each other their respective contents, the result would be dangerous, for gangrene would shortly supervene. These manifest truths may serve to persuade us, that the different parts of the body on which particular kinds of virus directly act, are so organized, or modified as to be subject to the impressions of those agents, with which they come in contact.

Such appears to me to be the reason why the skin and mucous membrane of the air-passages, although the most exposed to the immediate contact of the virus, which produces cholera, do not appear to be particularly affected by it; certainly they would be the first to receive impressions from it, if their organization had been so predisposed.

The contrary takes place with the gastro-enteric mucous membrane. This, as in the summer it appears always to be in a state of considerable excitement, either on account of the quality of the food taken into it, or for other reasons, is therefore disposed to receive with more facility the

cholera virus, which is diffused through it, by means of the poisoned atmosphere circulating through it, mixed with the aliments introduced into the stomach; the action of both of which causes becomes more, or less energetic according to the greater or less predisposition of the parts, and of the individual constitution, to which they are applied.

But although we may believe that the action of this deleterious principle is exercised immediately on the nerves of the gastro-enteric mucous membrane, we must, nevertheless, admit that these nerves transmit the impression received, to the nervous centre, and occasion in them very grave disturbances. The encephalon, however, is not equally affected; this organ continues regularly to proceed in the exercise of its functions; it has been already said that many individuals, under the most violent affection of cholera, nevertheless remained conscious. From thence it may be well argued that the encephalon, though weakened in its energy for want of nutrition, in

conseqnence of the diminished circulation, does not appear to be so far affected, as to make us believe that it has any organic lesion.

The before-mentioned examinations would certainly not be sufficient, if we did not also know the mode, in which the cholera virus exercises its action on the mucous membrane of the stomach, and bowels, and could not indicate some medicine, which constant experience has proved to be the most likely to effect a cure.

We have said that the different kinds of virus, when they are mixed with the circulation, and so brought in contact with those parts of the body on which they are capable of acting directly, nevertheless do not exercise that action otherwise than either as stimulants, sedatives, or irritants, according to their nature. To this last class, according to some writers, belong the various kinds of miasmatic virus, and consequently that generating cholera; but others who regard this latter as stimulant, have in their favour the fact of the abdominal pains, which are

symptomatic of this malady, and also the lesions of the intestines, which are found on the post-mortem examinations.

In comparing, however, these opposite opinions, we do not find any argument so strong as to induce us, without fear of mistake, to hazard a judgment in favour of one or the other; for I have often had occasion to observe, that the cholera began its attacks on some individuals, without any pain, or other symptom inducing me to suppose that there was a phlogistic action in the stomach or intestines. Such was the case amongst others of a lady named N., of about sixty years of age, in whom the first symptom which she observed was nothing more than a gradually increasing swelling of the abdomen, which compelled her to loosen all her clothes; and as she observed that this swelling continued to augment, she applied to medical advice, but before the physician could arrive, the vomit and alvine excretions had already manifested themselves to an alarming degree, and these were followed by coldness to the touch, copious

sweat, ardent thirst, and, in short, the whole lamentable train of symptoms which characterizes the state of collapse.

Should we not be justified in inferring from such a case, that the nature of the virus which produces cholera, by operating on the mucous membrane of the stomach, and bowels, had paralyzed the vascular network, from whence followed a free effusion of the serous part of the blood; consequently great swelling of the abdomen, and, finally, the evacuation of the intestines?

Some persons, however, relying on the examination of those symptoms of the malady, which distinguish its progress in the different stages, and also in the results of different dissections, maintain that the action of the virus in cholera, is of a stimulating nature; they say that coming in contact with the mucous follicles, as well as with the surface of the membrane, which covers the intestines, it excites them so as to impel them to a super-secretion, from which is derived that whitish liquid, which is so characteristic of the cholerose evacuations.

Whichever of these three opinions we may embrace, with regard to the nature of the action of the virus producing cholera, there can be no doubt, but that it is directly effected by some operation on the mucous gastro-enterica. The morbid appearances observed in the different stages of the malady, always distinctly proved, that the membrane was the first to be affected by it; with the difference, however, as to greater or less intensity, according to the temperament and predisposition of the individual. All the authors that I have consulted on this subject, agree in stating, that patients in every part of Europe, attacked by cholera, first suffered a diarrhœa, and that this continued for a longer or shorter time before the stage of collapse took place. The many instructive accounts which I met with on this point were unfortunately but too fully confirmed, both in the private and public practice, which it was my lot to exercise so long as the cholera raged in this island.

From the fullest evidence we may with certainty conclude, that a great part of the

serum of the blood being effused from the mucous membrane, the blood becomes consequently thicker, and is therefore retarded in its circulation; first in the capillaries, then in the vessels of greater diameter, as the serum continues to be separated; and this cause continuing to increase, the stage of collapse naturally succeeds. Having thus shortly described the observations resulting from a rigorous examination of that strange disturbance, which is usually occasioned in the animal economy by cholera, it will now be proper to turn to those considerations, which may enable us most sagaciously to discern the best method of cure; otherwise the remarks hitherto made would be mere lost labour.

## CHAPTER VIII.

### METHODS OF DIFFERENT PHYSICIANS IN THE TREATMENT OF CHOLERA.

If it be an indispensable canon of medical science that we ought to control the first symptom, which announces the presence of any malady in the animal economy—in the case of cholera the practice of this action is so indispensable, that even a few moments passed in neglecting its first symptoms, have been proved by experience, sufficient to render the disease most dangerous, incurable, mortal. It is therefore an act of charity in every physician, and required for the honour of his profession, to render as public as possible a maxim so highly important,

and which, if once universally embraced, will greatly contribute to render less fatal the attacks of this formidable disease. After having recommended, above everything else, an attention to this most indisputable rule, I proceed to explain, with the requisite brevity, and in the best manner that I can, the different methods which different authors have published, and which I have kept in view during my practice in treating the cholera, both among my private patients, and in the hospital which was placed under my direction. From the time when this alarming malady began to pass from Asia into Europe, one of my principal, and most assiduous occupations, was to study its nature. From that period I endeavoured, as far as was in my power, to procure the books which treated of it: after reading them successively, as they came to my hands, I reconsidered the various doctrines which they contained. I endeavoured to learn the nature of a disease, characterised by the symptoms, which they described; I observed the method of treatment

followed in the cure, but in this respect I found the most manifest discordance, notwithstanding that all the writers very nearly concurred, in their opinion of the symptomatology; for some of them recommended a method absolutely antiphlogistic, others prescribed all the therapeutical means of a stimulating nature, and lastly, some adopted a method partaking of both kinds of treatment.

Dr. A. F. lays it down that the only efficient method is to employ calomel and opium combined, tincture of opium and brandy, stimulating frictions, &c. Orton, at the beginning of an attack of cholera, trusts wholly to opium, in doses of three, or four grains; and if the desired effect is not produced, he reiterates the same in smaller doses, taken every three, four, or six hours. This gentleman asserts that he found the effects of stimulants in general very dangerous in this malady, and more particularly those of brandy, aromatic tinctures, camphor, essential oils, blisters, nitric acid, &c., and particularly of calomel and venesection.

Mr. G. H. Bell insists strongly on the practice of venesection. Therefore, after having spoken of the danger, which stimulating medicines may produce on the stomach, if administered whilst this viscus is in a disordered state, he advises, rather to administer calomel combined with opium and camphor, followed by a draught of brandy-and-water; and if the vomiting ceases, he prescribes the following mixture:—

| | | |
|---|---|---|
| ℞. | Ætheris Sulphuric. | ♏xxx. |
| | Tæ. Opii . | ♏x. |
| | Mist. Camph. . | ℥j. |

M. fiat haust.

to be taken every quarter of an hour, according to the urgency of the case: finally, he recommends cold drinks, and rubbing by stimulating substances over the whole body, nitric acid externally applied, blisters, and sinapisms.

There are also authors who wrote shortly after having observed, and treated cholera in India; as far as I have been able to collect from reading their works, I have found them

disagreeing but little, from the mode of treatment practised by those above mentioned; limiting themselves to contend with the symptoms, they administered every sort of medicine, which seemed to them efficacious in overcoming the symptoms, with which they meant to contend; those among them who thought that the malady depended on a disturbance of the nervous system, made use of opium, camphor, sulphuric ether, nitric ether, confection of opium, and aromatics. They who held that the malady was derived from a morbid state of the stomach, gave emetics of mustard, ipecacuanha, sulphate of zinc, or of copper, and antimonial preparations; others, in order to expel from the intestines that substance, which they regarded as the proximate cause of the irritation producing the morbid affection, prescribed purgatives of castor oil, croton tiglii, or jalap.

Some who thought that this disorder was derived from a debility of the nervous system, prescribed the combination of opium with camphor, or with other stimulants, such

as brandy, compound tincture of cardamum, oil of peppermint, and cajeput oil. But for fear of too much debilitating the stomach, they forbade the drinking of water.

The authors who studied cholera in Europe alone, in treating it, made use of a similar method, with the exception of those who added to it powdered charcoal and super-carbonated salts—these persons thinking that the virus of cholera had its seat in the venous capillaries of the lungs, whence arose the state of collapse, endeavoured to neutralise it by introducing carbonic acid into the circulation; there were also others who prescribed oxide of bismuth, ipecacuanha combined with opium and calomel, galvanism, cold baths, warm and vapour, and hot air baths; and, finally, the injection of saline solution into the veins.

## CHAPTER IX.

### TREATMENT IN THE FIRST STAGE OF THE CHOLERA.

WHEN a physician is requested to give the assistance of his art to a cholera patient, it will be his first duty to make the most accurate examination of the patient himself. Those appearances which are distinguishable by the senses, and indicate a morbid change as having occurred in the animal economy, will guide him in inferring the presence of the evil, and the true state of the case; consequently the investigation of the modifications, which in the cholera are presented in the face, in the beat of the pulse, in the nature of the evacuations, the

quantity of the food taken before the attack, the precise time, at which the first symptom appeared,—these are all particulars, which merit the greatest attention of a physician, who undertakes to heal the disease. Having made these researches with the most serious diligence, he must next apply himself to understand the temperament of the individual, interrogating him whether he has been subject to complaints of the viscera, and whether he suffered any such at the approach of the cholera; from a diagnosis well understood, it will be easy to decide what have been the symptoms, which declare the incipience of cholera, and consequently to render the physician more sagacious in applying those particular remedies, which he may deem most efficacious to overcome it.

When this island was first attacked by cholera, instructed as I was by the perusal of the authors previously consulted, I began my treatment by prescribing a purgative of rhubarb and calcined magnesia, or castor oil. I sometimes caused these remedies to be

combined with opium, in greater or less doses, as circumstances seemed to recommend. I endeavoured to assist the action of these medicines by drinks of a slight decoction of camomile, rice, or barley; this method in some patients, where the disease was but recently developed, succeeded well enough in arresting its progress; but when the application to medicine had been too long neglected, so that the alvine evacuations had become frequent and more watery, this regimen not rarely accelerated the stage of collapse.

The experience I acquired, in the progress of the epidemic, induced me to prescribe, instead of the medicines just mentioned, the immediate use of calomel in large doses, from which I always obtained fortunate results.

The oxide of bismuth, which having been greatly recommended by various German physicians, and for that reason used by me in a few cases, never produced the effect for which it was so much extolled. On the contrary, it often occasioned intestinal pains,

which greatly annoyed the patient; and although it sometimes delayed the *appearance* of the state of collapse, it never succeeded in stopping the diarrhœa, a circumstance so desirable in cholera.

Among the purgatives of which I prescribed the use, at the first appearance of the cholera in this country, I found, I must candidly confess, that those of an oleaginous and saline nature were very hurtful. To a lady suffering an attack of pleurisy, I ordered bleeding both local, and general, the effect of which was to lessen, but not to eradicate the accompanying pains. Wishing to obtain this effect, I proposed for her a purgative of castor oil; but this, in the course of the succeeding night, having acted excessively, augmented to such a degree the evacuations, which at the same time had become watery, that the state of collapse shortly afterwards supervened, and in a few hours she died.

This case, together with some others, all of which were remarkable, rendered me, from my own experience, very careful not to administer oleaginous, or saline purgatives

during the prevalence of the epidemic. I had for many years employed in my practice, and almost always with a fortunate result, the use of calomel in large doses for the cure of dysentery; a constant experience had convinced me that this medicine, far from increasing the alvine evacuations, rather contributed to their sensible diminution, and instead of occasioning great irritation, which they who are ignorant of the laws of medical action falsely suppose, produced, on the contrary, a remarkable calm. By its use the pains of the abdomen were stopped, the alvine secretions changed their appearance, and finally the disagreeable tenesmus, always present when the rectum is attacked, entirely gave way.

Having diligently compared these observations of mine, with the statements respecting the dissections performed in other countries, and with the knowledge of the symptoms, which I noticed in the first stage, I thought myself justified in concluding that the action of the cholera virus is principally on the stomach and intestines; relying on

this criterion, I immediately determined to treat cholera in the same manner, which some authors had recommended, but in different doses, and I therefore began to practise it in the early stage of the disease as follows.

After having formed to myself the diagnosis, I administered to the patient 20 grains of the chloride of mercury, that is to say, calomel, mixed with an equal quantity of sugar, reduced to an impalpable powder. Having observed in practice that calomel given in pills was often rejected by vomiting; I thought it expedient to administer it in powder; but I shortly perceived that given even in that manner, it adhered to the papillæ of the tongue, and that so tenaciously, that it could not be entirely removed, either by frequent vomiting, or by continued drinking. In order to obviate this inconvenience, I exhibited it rubbed up with sugar, in the same manner as I had been accustomed to give it to infants. Being thus mixed, and consequently enlarged in volume, I caused it to be placed on the tongue of the patient, and

made him immediately take a draught of water, which contributed to propel the medicine into the stomach, before it had become attached to the tongue, and mucous membrane of the fauces. If, after this application, the diarrhœa continued, evidencing the escape of serum, I repeated, after three hours, this medicine, in an equal dose, and reiterated the practice until the evacuations became more dense, less frequent, and of a greenish colour. When all this had been obtained, I suspended the use of the calomel, and after a day or so, prescribed a purgative. This mode of treatment succeeded in overcoming, in 223 individuals, the symptoms which usually precede cholera; though without such a system these persons would probably have passed into a state of collapse. In these 223 cases I found it necessary to repeat the calomel to only one individual five times, to some others three times; but in the generality of cases a single dose was sufficient. Many of my patients, under other guidance, had previously taken oxide of bismuth, but not having received

from this any great advantage, they were advised, under my direction, to have recourse to calomel, which soon relieved them.

## CHAPTER X.

### TREATMENT IN THE STATE OF COLLAPSE.

#### 1st. *As to Mild Collapse.*

For the better understanding of what I shall have to say respecting the state of collapse, it is important to consider it in two different relations, namely, 1st, as to the milder, and 2nd, as to the graver form.

In the stage of mild collapse, the loss of the serous part of the blood not being very considerable, there may be some hope of effecting a cure. When I commenced my duties at the hospital, I first administered in this stage, successively, all the remedies, which the authors of the different works consulted by me had most strongly recom-

mended; experience, however, taught me that the patients rejected all medicines of a liquid nature, consequently as they were not retained in the stomach, it could not be reasonably expected that they would produce any benefit.

Again, medicines of a stimulating nature, produced very painful sensations in the mouth, and pharynx; so that the patient, after taking them once or twice, generally refused them.

We had recourse then to medicines of the solid class, which it was supposed would, from their nature, remain longer on the stomach; but from these only small advantage was obtained, inasmuch as great part of them were rejected, in the same manner as the liquids had been.

Opium, which has been very much recommended in cholera, was not so often thrown up. But its effects were very injurious, because often operating powerfully on the nervous system, it tended to make the patient pass from the mild to the grave state of collapse. I combined it with ipecacu-

anha, either alone, or together with calomel, in small doses; but the result was not less detrimental, (in which case, it produced some good, except when it was administered in the first stage of the malady). Subsequently I prescribed ipecacuanha in doses of 15 grains, and repeated it often in the course of the day, but without any effect. I next gave carbonate of soda with tartaric acid, calcined magnesia, carbonate, alone, or combined with rhubarb; and I often added to these tincture of cardamum, opium, aromatic confection, and sulphuric æther; I modified this last method, deducting some ingredients and adding others, but the effect appeared to me quite inefficacious, and sometimes even dangerous. In short, I tried so many medicines, that it would be tedious to recount them all; but I found nothing better than calomel in large doses.

There remained the vapour and hot-air bath, but neither this, nor the usual plan for warming a patient by hot bricks, stone bottles with water, &c. &c., was of any service. I therefore think, we may fairly infer, that all

methods of heating the body are useless; moreover, the patients in this country, could not endure the touch of warm substances, they preferred throwing off all the bed-clothes, and even lying naked on the cold pavement. Irritating frictions, which they could seldom bear, were found to be not only useless, but often injurious; subsequently I directed them to be rubbed with a solution of morphine and camphor; this was in the proportion of a grain of the former, and three of the latter, to every ounce of alcohol. The patients were not only comforted by this, but received remarkable benefit.

It has been already said, that the external surface of cholera patients, was generally observed to be extremely cold, the immediate effect of their morbid state; the constant experience of this led me to reason thus, that the cholera virus spreading through the whole animal economy, operated so as to concentrate the expansion of heat on the internal viscera; acting on this reasoning, I was induced to prescribe the use of cold

baths, which, attracting the heat from the internal, to the external parts of the body, gave the patients marked ease, more particularly throughout the course of the intestines, and the region of the stomach. The cold bath was tried in this manner; the patient was laid at full length in an empty vessel, and cold water was poured upon him by three or four buckets at a time; this application of cold to the whole surface of the body, acted so powerfully that the patient was immediately reanimated, and all the symptoms, as it were by magic, suddenly diminished their malignant intensity.

A girl of 18, who had refused to take any medicine whatever, was found in the last extremity; as I had experienced the good effects of the cold bath administered to another female, who was admitted into the hospital in the stage of grave collapse, I thought it advisable to try it in this second patient. She, however, being at the point of death, I began to fear that the remedy would in this instance lose the credit which it had acquired, if she were to die; but in-

fluenced by the reasoning, and exhortations of one of my assistants, and being certain in my own mind that the girl in her present state must inevitably die, I determined at last to subject her to the trial. The success was marvellous, for the girl, of whom we had for several hours ceased to entertain any hope, became at once changed in appearance; her face showed animation, her eyes completely opened, and her pulse began to be felt; but after a little while she returned to her former insensible state, and refusing again the medicines, we were under the necessity of subjecting her again to the cold bath, which produced the same good effect as before; she no longer refused medicine, so that we were enabled to administer the calomel in a dose of 20 grains every half hour; in the meanwhile she had two other cold baths. The reaction in the patient was mild; the cure was perfect, and without the slightest salivation or any other unpleasant symptom. I must, however, add, that in almost all the persons on whom the cold bath was employed, a very severe re-

action followed, and some of them, though quickly cured of the collapse, fell victims afterwards to the reaction which supervened; a circumstance which persuaded me that the baths should only be employed in cases of the most grave collapse.

In young and robust men, where the attack of cholera had been recent, and the loss of the serous part of the blood not very copious, bleeding, combined with calomel, was very successful; but it was not so with persons of a more advanced age, for however good their constitution seemed to be, venesection was generally productive to them of very injurious effects.

Among the different methods of which I made experiment, for the purpose of arresting the further diminution of the serous part of the blood, was the following: if the patient whom it was intended to subject to this treatment was in the stage of mild collapse, and was young and of good constitution, at first he was bled, then I ordered him a scruple of calomel, to be repeated every hour. But if he was of a more ad-

vanced age, or of a weak temperament, I omitted the bleeding, and began at once with calomel. I permitted him to drink at will of iced water, and to keep ice in his mouth; and if cramps occurred, I caused the affected part to be rubbed during the spasm with a weak solution of morphine and camphor in alcohol.

The præcordial cingulum was generally vanquished by the application of sinapisms or blisters.

By this very simple practice, I observed that in the majority of cases, after a few administrations of these remedies, the evacuations became less frequent, and if the vomit continued for some time, yet the ejections were composed only of the water which had been drunk, which, having become heated in the stomach, disturbed that organ, and was consequently rejected by it.

In such a state of circumstances, the calomel continued to be administered at the same intervals of time, but as soon as the evacuations began to be thicker or of a greenish colour, and the skin gradually lost

its livid colour; when the pulse beat with more animation, and the voice became clearer, and the thirst ceased to torment the patient; then I prescribed that the doses of calomel should be exhibited with a longer interval of time; for instance, if in the beginning of the treatment they had been given every hour, at this point they were given every two hours.

In proportion as the amelioration progressed, the medicine was still more rarely given; but it was not altogether laid aside until all the symptoms vanished: when this state had been attained, the patient, if he wished it, was allowed some light food, such as rice-milk, barley-broth, or arrow-root, and sometimes even light chicken-broth.

Whilst endeavouring to cure a certain patient by means of large doses of calomel, having observed that a reaction was taking place, I thought I might suspend its further administration, as no longer necessary; however, in about four hours symptoms of collapse reappeared; I then had recourse anew to calomel, but the

loss of serum, which had occurred during the suspension of the medicine, had been so excessive, that it produced shortly afterwards the death of the sufferer. Other cases of a like nature happening, I was induced subsequently not to desist from the use of calomel, unless very gradually, and I found this practice very generally successful.

Walking one day in company with Dr. Charles Galland, we met with a reverend ecclesiastic, Don Pietro Borge, in company with his sister. I mentioned to Dr. Galland that this lady was one of the patients whom I had cured by calomel, and I desired Mr. Borge to tell my colleague the number of doses which she had taken; he answered they amounted to twenty-four, and his sister immediately rejoined,—"I must further say, that on one occasion I happened to neglect taking the medicine but a few minutes after the appointed hour, and immediately I began to feel a great sense of cold." Several other patients made

me candid confessions of the same nature after they had been cured.

*2nd. As to grave collapse.*

If the patient in a state of grave collapse was young, I immediately tried venesection, after which I administered to him a scruple of calomel every half hour. When the præcordial cingulum was very distressing, which often happened, I applied to the epigastric region mustard poultices, and sometimes also blisters, and leeches. I caused him to drink iced water whenever he desired, and if the extremity of the case required it, I subjected him to the cold-bath; at this point, however, it must be kept in mind, that in the stage of grave collapse, the patients, if they were of scrofulous habit, or given to spirituous liquors, and brought to the hospital after a debauch of that kind, very seldom recovered. Any medicine whatever administered to them was totally thrown away. The evacuations of such patients, both on account of the

protracted discharge of fluids and of the want of absorption, became less abundant, as it were, gelatinous, and of an ashy colour, having the very remarkable smell of cholera, and they soon ceased altogether.

Whenever the calomel operated beneficially, the malady assumed a different aspect, the evacuations acquired a greenish colour, became more consistent, and almost fæcal; the pulse rose in strength; the livid colour became lighter; a certain warmth was felt over the whole body, and all the symptoms gradually improved. This amendment, however, ought not to induce any one to cease altogether from the use of calomel, since a mournful experience, as I have already observed, has taught me that this state was generally followed by most alarming symptoms, which compelled me to resume its use, as I had practised in treating the malady in the mild stage, I mean by a gradual diminution of the administration of calomel. If then the malady continued to advance for the better, some aliment was allowed the patient, but it was

necessary to be very attentive to its quality. The best was gruel, composed of vegetable substances, sago, tapioca, salep, and other farinaceous substances, more particularly arrow-root. These aliments being but moderately nutritive, and therefore of easy digestion, did not subject the patient to those pains in the rectum, which many authors assert to be the consequences of the disorder.

## CHAPTER XI.

### TREATMENT IN THE THIRD STAGE, OR REACTION.

HOWEVER great may be the watchfulness of a physician, it can never be too intense in the treatment of a patient, at the beginning of this stage. He must not trust in the least to the feelings of a patient, who, when the stage of collapse has ceased, and a kind of placid calm has supervened, appears to himself to be entirely out of danger. Such an appearance I found to be almost always flattering, and deceptive; for often before we could think of it, a new train of the most alarming symptoms pre-

sented itself, threatening immediate dissolution; therefore when the patient is observed in the stage of reaction to complain of a pain in the stomach, and when, on a slight pressure, swelling takes place; when the pulse becomes hard and frequent, the skin hot, and the cheeks flushed, and a slight vomit takes place of greenish matter, the rank seeds of the hidden malady should immediately induce the medical attendant to apply leeches on the seat of pain, to administer abundant draughts of mucilaginous cold drinks, and to use clysters of gruel and other remedies of a like nature; but if, in spite of these attempts, the inflammation should progress, in that case venesection should be employed, at first generally, and afterwards, if necessary, by applying local blisters.

If the symptoms indicating gastritis, should be accompanied with enteritis, then immediately, without loss of time, he must have recourse to general bleeding. Blisters also on the thighs and legs must not be delayed, so as to prevent as much as

possible, any affection of the brain which unfortunately is too common in such cases.

If the lungs, or the head should show signs of inflammation, general and local bleeding should be practised, together with diluent drinks, until some mitigation of the symptoms appears: again, if the heart be affected, blisters should be applied to the thorax, and, if the head is the seat of inflammation, then behind the shoulders, and the inside of the leg; for all these affections the practice of mild laxatives has been recommended. I prescribed the use of tartarized soda, in doses of two drams every two or three hours, and this not having the desired end, I afterwards administered calomel in doses of three, or four grains, and sometimes also castor-oil the next day; from this treatment I obtained beneficial results.

When the patients were persons who had formerly suffered chronic diseases in any of the viscera, every method of cure, under such circumstances, was almost certain to be useless. The inflammation seiz-

ing particularly on the part which had been long weakened, increased so rapidly, that it was impossible to conquer it by any mode of practice.

# CHAPTER XII.

## OF PROPHYLACTICS.

When cholera appears in a country, it should be the first duty of every physician to spread among the mass of the people the best directions for the preservation of health, earnestly advising them to be cautious in the choice of dormitories, and the kind of clothing most fit to preserve the skin against the pernicious influence of the atmosphere, to avoid not only abuse in food, but also extraordinary fatigue, which tends to weaken the animal economy; I shall mention but a few circumstances, which fall within the comprehension of even the most unlearned

in medicine, but which my experience, during the prevalence of this epidemic, induce me to recommend to the most careful attention.

*Food.*

The best articles of food, during cholera, are those which are most simple and easiest of digestion; but they should be chosen of a good quality, carefully prepared, and used with moderation.

When food is used in a time of cholera to any excess, its volume acting mechanically, impedes the regular venous circulation, it presses on the lungs, occasions difficult respiration, and produces a sense of weight in the stomach; hence the quantity resists the action of the stomach, and becoming, as it were, an extraneous body, produces local derangements, which induce a general feeling of oppression; and this occasions vomit or diarrhœa, because the food not being converted into chyme in the stomach, excites vomit in part, whilst the portion passing down, rather irritates the intes-

tines than acts as a proper stimulant to them. The consequence of this is diarrhœa. Their proper office being thus altered, if the individual, not being previously predisposed to cholera, has hitherto escaped, he now exposes himself to be easily affected; and if the malady has not yet developed itself for want of an occasioning cause, he may from these circumstances accelerate the attack; but it is not necessary, in order to avoid these inconveniences, that we should go to the opposite extreme; for then the organs being deprived of that which they require to provide against their own decay, would become weakened, their energy diminished, and at length rendered unfit for their proper action. Therefore it is advisable that food should be used in a moderate quantity, so as to guard against that derangement of the animal economy which manifests itself by the painful sensation of hunger.

The inconveniences which are produced by excess in quantity may also result from defect in quality. Those substances, which are too stimulant and of little nutritive power,

excite the stomach and other parts too much, and do not give sufficient strength. A continued use of them produces an incapacity for digesting plain food, and also diminishes the heat of the stomach. Aliments deficient in nutritious or stimulating power add little to the nourishment, and do not sufficiently stimulate the stomach to be modified by it; consequently they pass from this organ insufficiently assimilated into the intestines, and produce diarrhœa, because they are not adapted to excite the proper action of these organs. All this shows that the articles of food should be good in quality, and moderate in quantity.

The kinds of food possessing these qualities in the highest degree are those in which fibrin predominates; therefore you may use with impunity the flesh of sheep, rabbits, and beef, if not tough; these kinds of flesh ought to be well dressed, and without aromatic condiments. Jelly, inasmuch as it is not very exciting and moderately restorative, may be discreetly used, but it requires condiments to be well digested by weak sto-

machs. The broth and flesh of veal and chicken, when young, are preferable to all meats, as being nutritive and easily digested. Albuminous food, if too much dressed, produces great disorders of the stomach—therefore you should particularly avoid brains, liver, oysters, eggs, blood, and, above all, fried fish, in which this principle prevails. With regard to this food, I think it proper to state that very many of the individuals who were under my care, both in the hospital and private practice, suffered attacks of cholera a few hours after eating fried fish. These sad effects proceed primarily from the albuminous substance, which having passed into a state of solidity not easily dissolved, and being covered with an irritating coating, becomes altogether indigestible; and secondly from the oil, which having undergone the action of fire, is so modified as to render it injurious to the stomach. When the atmosphere, indeed, is free from miasma, and the vital organs have not to contend against that powerful enemy, the evils occasioned by irritation of the stomach are much less.

Dishes composed of farinaceous substances, as tapioca, sago, macaroni, rice well boiled, may be used without any fear, since they are moderately nutritive and not irritating; the condiments used to give these articles a taste, and to render them more or less palatable, ought to be of the simplest and least stimulating kind. Most fruits, when the cholera prevails, are to be avoided, particularly apricots, peaches, cherries, and strawberries. Pumpkins, melons, and figs, are so dangerous as often to cause the malady to develope itself directly after they have been eaten. Many of the cholera patients, who were brought to the hospital, assured me that diarrhœa took place after eating fruit of this kind. With regard to figs, the worst consequences were produced by the seeds, which, undergoing no modification in the stomach, irritate by their presence the gastro-enteric mucous membrane. A little good wine at dinner is fitting for those accustomed to it, to others it might be too stimulating.

### *Sleep and Dormitories.*

Sleep should be regulated by the necessity for it—too much relaxes the body, and blunts the mind; the want of sleep, on the other hand, produces still greater inconvenience, more especially if the intellectual faculties whilst awake have been greatly exercised. You should sleep at night, in order that by day you may profit by the light, which always conduces to health. The places for sleeping ought to be clean, lofty, and easily ventilated, but it is dangerous to expose yourself during sleep to a current of air, or even to have the windows open, because as in the night the watery vapours condense themselves more, the air becomes a vehicle much adapted to introduce miasma; and if in sleep the absorption, as it is said, be considerably augmented, the malady may, from this circumstance, more easily insinuate itself into the system.

### *Clothing.*

The external skin, which in the animal economy is the organ that first feels the

impression of the atmosphere, must, in the time of cholera, be most carefully attended to. As it sympathizes with the gastro-enteric tube, the latter would suffer great derangement if the skin were not kept in a proper state. To prevent these disorders we cannot do better than to guard the skin, as far as is possible, against changes of atmospheric temperature; this purpose is well answered by woollen garments remaining in immediate contact with the skin; the slight friction which they produce causes a moderate degree of irritation, and draws towards the surface a quantity of blood taken from that which circulates in the interior of the body; and as wool is not a conductor of heat, it preserves the skin nearly in an equal state of warmth, and thus the transpiration continues to maintain itself. If these cautions be observed, the atmospheric changes will have no direct influence on the skin, which they would have, if the vestments were of linen. Moreover, woollen clothing receives the moisture of the perspiration, and does not transmit it for some time, and by this

means also it protects the skin against the atmospheric changes.

They, who have not the means of furnishing themselves with garments wholly woollen, should at least endeavour to procure a woollen belt to be bound around the abdomen. This practice has been found useful both in India and Europe.

If, however, these precautions should have been omitted, and more especially if the feet should long remain wet, the skin would be suddenly felt to be cold, its pores would contract, the transpiration would be stopped, and consequently the back and gastro-enteric mucous membrane would receive a quantity of blood passing through them, which might open the way to the developement of cholera. In order that the skin should regularly execute its functions, it must be kept constantly neat and clean; but in order to attain these objects, it is not prudent, in a time of cholera, to use cold baths, which, for the reasons before stated would produce unpleasant effects; the dirt, however, should be removed by tepid water, wiping the skin well afterwards.

*Bodily Exercises.*

The motion of the organs, if too long protracted, instead ot giving them fresh energy, renders them at last unfit to exercise their proper functions; thence follows a debility in the vital and animal nervous system: and the operations of the organs being confused, the assimilation is disordered, the secretions are vitiated, and a general weakness comes on. Repose then becomes necessary, in order to restore a just equilibrium in the action of the animal economy. But this, again, even if too much prolonged, is not so pernicious as an excessive continuance of motion. The total cessation of movement occasions an incapacity to move, an insensibility in the limbs, a diminished activity of the digestive organs, and consequently a defect in the assimilation of food; a great quantity of fat is thus accumulated, at the expense of the organs, and in consequence an extreme languor is produced in the fibres. In both cases, therefore, the force of vital resistance being

diminished in the organs, they are rendered more disposed to receive with facility the impressions of the predominant miasma. Hence it is evident that rest and exercise ought to be reciprocally proportioned to each other, in order to enjoy the beneficial effects of both.

Active exercises, like walking, shooting, fencing, gymnastic exercises, &c., so long as they are regulated by a sound judgment, can do no harm in a time of cholera,—on the contrary, it appears to me that they should not be abstained from. Swimming, however, as it impedes the cutaneous transpiration, and augments the action of the gastro-enteric mucous membrane, is no doubt dangerous, more especially to a person who plunges into the water when heated. They who are hindered by any obstacle from using active exercise, should apply to exercises of a mixed nature, such as riding on horseback, but then only after the heat of the day has declined, and the digestion is perfected; and inasmuch as indolence is a kind of rust, which slowly con-

sumes the body, and oppresses the spirits, it is necessary that they who have not the means of enjoying active, or mixed exercise, should practise that which is passive, such as taking an airing in a carriage, or sailing in a boat.

Again, we ought not, through fear of this disorder, to neglect the exercise of the intellectual faculties; for besides the loss of their immediate effects, they may even produce a hazard of attack from disease. The total want of all occupation may probably turn the mind to the contemplation of the terrible consequences of the predominant disease. Every one knows what evils are produced by keeping the mind always fixed on a malady, which we are either suffering or fear to encounter. It is, therefore, useful that those who are not addicted to profound studies, should employ their leisure hours in the reading of books, which are either instructive or innocently amusing.

Vehement passions, such as terror, or the shock of unexpectedly hearing bad news, are among those occasional causes which

may easily induce cholera. Who does not know how lamentable their effects are on the nervous system, and consequently on the gastro-enteric and urinary passages? Much caution should therefore be used, and all possible prudence observed in communicating information of this sort, that we may avoid all painful regret at its fatal consequence.

# TABLE

*Containing the Names of the Cholera Patients received into the Hospital of the Normal School, and the quantity of Calomel in grains taken by each.*

| Date of Admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of Death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| June 20 | Nicola Ambrosini . | Valletta . | 48 | .. | June 20 | .. | Found in the hospital in a state of reaction, some of them with typhoid symptoms. |
| | Raffael Fenech . | do. . | 22 | .. | 26 | .. | |
| | Gaetano Xuerof . | do. . | 30 | .. | 20 | .. | |
| 21 | Maria Jones . | Senglea . | 32 | .. | 22 | .. | |
| | Salvatore Carnana . | Valletta . | 64 | .. | 22 | .. | |
| | Marianna Caliero . | Vittoriosa | 47 | .. | 22 | .. | |
| | Giovanni Schembri . | Forzato . | 50 | June 23 | .. | .. | |
| | Angelo Cachia . | do. . | 26 | 24 | .. | .. | |
| | Anna Colaira . | Floriana . | 56 | 23 | .. | .. | |
| 23 | Giuseppe Psailæ . | Forzato . | 48 | 25 | .. | .. | On this day my service commenced in the hospital. |
| | Michele Talzon . | Cas. Asciak | 42 | .. | .. | .. | |
| | Giovanni Callus . | Valletta | 35 | .. | 24 | .. | |
| | Mich. Ang. Villa . | Cospicua . | 38 | .. | 30 | .. | Bloody evacuations. |
| | Salvatire Cremona . | Valletta . | 60 | 27 | 30 | .. | |
| | Rosa Xneref . | do. . | 53 | .. | | .. | |
| | Paolo Debono . | Birchircara | 54 | .. | .. 24 | .. | |
| | Grazia Cutazar . | Zabbac . | 16 | July 1 | 24 | .. | |
| | An insane person . | Valletta . | .. | .. | | .. | This insane person, brought to the hospital by the police, name unknown. |
| | Pasquale Galea . | Forzato | 28 | .. | .. 25 | .. | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Maria Agnis | Zabbac | 70 | June 27 | 25 | .. | | |
| | Giuseppe Magro | Cospicua | 25 | .. | .. | .. | | |
| | Vincenza Maniglia | do. | 79 | .. | 29 | .. | | |
| 24 | Giovanni Debono | Forzato | .. | 29 | 26 | .. | | |
| | Francesco Glevan | do. | 22 | .. | .. | 160 | | |
| | Saverio Farrugia | Valletta | 69 | .. | 25 | .. | Grave. | |
| 25 | Vittoria Grech | do. | 24 | .. | 26 | .. | Grave. | |
| | Antonio Mercieca | Forzato | 22 | .. | 26 | 20 | Pregnant and great pain. | |
| | Daniel Nicholson | Scotland | 28 | .. | 29 | 20 | Refused the medicines, and died in the reaction. | |
| | Salvatore Xicluna | Floriana | 43 | .. | 25 | .. | Lived a few moments. | |
| | Gaetano Zammit | Cospicua | 80 | .. | 27 | .. | Received from the Civil Hospital. Refused all medicine. | |
| | Veneranda Fenech | Valletta | 24 | July 5 | 25 | .. | Lived a few minutes. | |
| | N. N. insane | do. | | .. | .. | 160 | | |
| 26 | Saverio Farrugia | do. | | June 29 | 25 | .. | | |
| | Giuseppe Psaile | Forzato | 48 | 30 | .. | .. | | |
| | Angelo Calleja | Valletta | 60 | 30 | .. | 480 | Arrived from Fort Ricasoli convalescent. | |
| | Mina Spiteri | do. | 64 | .. | .. | .. | Received from the Civil Hospital in a state of mild reaction. | |
| | Margarita Mifsud | do. | 27 | July 7 | 26 | 90 | Refused to continue the medicine. | |
| | Giuseppe Grech | do. | 2 | .. | .. | 160 | | |
| | Margarita Balzan | do. | 66 | June 29 | 29 | 100 | Refused medicine. | |
| | Teresa Attard | do. | 24 | July 1 | June 29 | 180 | | |
| | Battista Mora | do. | 12 | .. | .. 29 | .. | Refused medicine. | |
| | Margarita Camelleri. | Cospicua | 30 | .. | 26 | .. | Received in state of reaction. | |
| | Giuseppa Volpi | Franconi | 23 | .. | 20 | .. | Lived but a few minutes, and refused medicine. | |
| | Caterina Spiteri | do. | 37 | 1 | .. | 130 | | |
| | Giuseppe Muscat | Valletta | 20 | 1 | .. | 100 | | |
| | Giuseppa Camilleri | do. | 40 | .. | 27 | 60 | Refused to continue the medicine. | |

| Date of Admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| | Andrew Adams . | Schoo. Rose | 23 | June 29 | .. | 240 | |
| June 27 | Giuseppe Teuma . | Valletta . | 25 | .. | July 1 | 20 | Refused to continue the medicine. |
| | Rosa Vassallo . | Birchircara . | 70 | July 9 | .. | 260 | |
| | Vincenzio Xerri . | Floriana . | 17 | 3 | .. | 240 | |
| | Concetta Cuschieri . | Valletta . | 28 | .. | June 29 | 50 | Died after miscarriage. |
| | Michele Xueref . | do. . | 91 | June 30 | .. | 80 | |
| | Anna Schemdri . | do. . | 53 | July 8 | .. | 230 | |
| | Salvator Micallef . | do. . | 80 | June 30 | .. | .. | |
| 28 | Maddalena Mamo . | do. . | 27 | .. | July 1 | 40 | Refused to continue the medicine. |
| | Robert Bark . | Sh. Somerset | 15 | July 1 | .. | 580 | |
| | Andria Cauchi . | Forzato | 27 | 1 | .. | 480 | |
| | Salvatire Zarb . | Floriana . | 20 | June 30 | .. | .. | |
| | Andria Debono . | Valletta . | 22 | .. | June 28 | 20 | Lived a few minutes in the hospital. |
| | Angelo Spiteri . | do. . | 15 | .. | 28 | 10 | Refused to continue the medicine. |
| | Rafaele Portelli . | Naxaro . | 62 | .. | July 1 | .. | Refused to take medicine. |
| 29 | Brigeta Bugeja . | Valletta . | 55 | .. | June 29 | .. | Received in a dying state. |
| | Emmanuele Cremona | do. . | 10 | .. | July 3 | 40 | Died in the reaction which followed his admission. |
| | Salvatore Agius . | Zabbac . | 26 | 30 | .. | .. | |
| | Salvatore Azzopardi | Valletta . | 30 | .. | June 30 | 20 | |
| | Anna Attard . | do. . | 11 | July 2 | .. | 80 | |
| | Gaetano Bussitil . | Birchircara | 57 | .. | July 3 | 20 | Refused to continue the medicine. |
| | Catarina Zahra . | Siggieui . | 70 | .. | June 30 | 20 | Refused medicine. |
| 30 | Benedetta Debono . | Valletta . | 42 | .. | July 2 | .. | Died two hours after his reception into the hospital. |
| | Rocco Muscat . | Zurnio . | 20 | .. | June 30 | 20 | Refused medicine. |
| | Nicola Muscat . | Floriana . | 50 | .. | July 3 | 60 | Typhoid reaction. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Catarina Cassar | Senglea | 30 | | 2 | .. | .. | |
| | Vincenzo Tonna | Valletta | 40 | .. | | 3 | 60 | Recovered from the cholera, relapsed, and refused to take more medicine. |
| | Georgio Tava | Forzato | 26 | .. | | 1 | 80 | Refused to take more medicine. |
| | Rosa Mazza | Valletta | 54 | .. | | 10 | .. | Refused calomel, but took other medicine. |
| | Rosa Sieberas | Floriana | 60 | .. | | 5 | 80 | Died in the reaction. |
| | Rosa Xerri | Valletta | 66 | .. | | 6 | .. | Received in a state of apoplexy. |
| | Giovanni Vella | Gudia | 50 | .. | | 1 | .. | Not being able to take any medicine, died in a few hours after his admission into the hospital. |
| July 1 | Vincenzo Calleja | Valletta | 55 | .. | | 1 | .. | Not being able to take medicine, he died a few hours after his admission into the hospital. |
| | Giuseppe Setuto | Forzato | 27 | | 6 | .. | 80 | |
| | Angelo Bugeja | Floriana | 18 | .. | | 2 | 40 | Died in a state of great cold. |
| | Antonio Mizzi | do. | 63 | .. | | 2 | 60 | Died in a state of great cold. |
| | Gio. Maria Ciantar | Forzato | 16 | | 8 | .. | 340 | |
| | Angela Micallef | Valletta | 24 | | 3 | .. | 280 | |
| | Felice Sirortino | Sta. Vennera | 60 | | 5 | .. | 340 | |
| | Antonio Zerafa | C. Asciak | 40 | .. | | 2 | 40 | Unable to take medicine by the mouth. |
| | Giuseppe Rogue | Valletta | 20 | | 7 | .. | 160 | |
| | Michele Borg | do. | 50 | | 4 | .. | 80 | |
| | Giuseppe Vassallo | do. | 18 | .. | | 9 | .. | Refused medicine. |
| | Maria Coleiro | C. Tarscien | 20 | .. | | 3 | 20 | Refused medicine. |
| | Lorenzo Bondini | Senglea | 65 | | 6 | .. | 400 | |
| | Maria Said | Valletta | 45 | | 7 | .. | 80 | |
| | Giuseppa Borg | do. | 56 | .. | | 2 | 80 | Died in the reaction. |
| 2 | Grazia Camilleri | C. Asciak | 85 | .. | | 3 | .. | Died two hours and a half after he was received into the hospital, and was unable to take any remedy. |
| | Giuseppe Fenech | C. Tarscien | 87 | .. | | 2 | 60 | Died three hours after his arrival at the hospital. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| | Lorenzo Pullecino | C. Birchircara | 14 | July 7 | .. | 130 | |
| | Lorenzo Vella | Floriana | 21 | .. | July 11 | .. | Died after a relapse. |
| | Michele Hali | S. Giuseppe | 12 | .. | 2 | .. | Refused medicine. |
| | Angela Gatt | Floriana | 48 | 7 | .. | 100 | |
| | Maria Carnana | C. Curmi | 75 | .. | 2 | .. | Died a few minutes after being received. |
| | Saveria Balzan | Valletta | 5 | 5 | .. | 24 | |
| | Carmalo Mili | do. | 48 | .. | 2 | 80 | Died twelve hours after his arrival at the hospital. |
| | Barnardo Frendi | do. | 24 | .. | 4 | .. | Refused medicine. |
| | Racco Saliba | do. | 24 | .. | 3 | .. | Refused medicine. |
| | Mar. Grazia Sultana | do. | 45 | .. | 3 | .. | Treated with oxide of bismuth. |
| | Ursola Spiteri | C. Asciak | 66 | .. | 3 | .. | Refused medicine. |
| | Annunz. Gabaretta | Floriana | 12 | .. | 2 | .. | Died three hours after entering the hospital. |
| July 3 | Angela Bezzina | do. | 48 | .. | 5 | 160 | Died in the reaction. |
| | Loreto Gauci | C. Curmi | 63 | .. | 3 | 20 | Died five hours after he was received. |
| | Giuseppe Xerri | Valletta | 55 | .. | 3 | 80 | Died four hours after he was rece ved. |
| | Giovanni Schembri | Convict | 55 | .. | 3 | 80 | Died five hours after he was received. |
| | Vincenza Azzopardi | Valletta | 80 | .. | 3 | 58 | |
| | Maria Suda | do. | 42 | .. | 6 | .. | |
| | Franc. Sav. Nicefaro | R. M. F. Re | 31 | .. | 4 | 120 | Refused to continue the medicines. |
| | Anna Sammut | Valletta | 40 | .. | 3 | .. | Refused medicines. |
| | Aloisia Vella | C. Zabbac | 50 | 9 | .. | 470 | |
| | Newla Pace | Valletta | 60 | .. | 3 | 20 | Died soon after he was received into the hospital. |
| | Rosario Bianco | do. | 19 | 4 | .. | 20 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Antonio Cassar . | do. . | 70 | .. | | 4 | 20 | Lived seven hours in the hospital, and refused to continue the medicines. |
| | Nicola Zammit . | Vittoriosa . | 58 | 9 | .. | | 340 | |
| | Giovanni Baldachino | Valletta . | 56 | 4 | | 4 | 80 | Lived thirteen hours in the hospital. |
| | Caterina Caliero . | C. Zurrico . | 60 | .. | | 3 | 20 | Lived an hour in the hospital. |
| | John Winter . | Scho. James | 20 | 6 | .. | | 232 | |
| | Carmela Agius . | Valletta . | 24 | .. | | 3 | .. | Treated with ipecacuanha. |
| | Paolo Borg . | R. M. F. Re | 26 | 7 | .. | | .. | |
| | Paolo Hili . | Valletta | 45 | .. | | 7 | 340 | Died in the reaction. |
| 4 | Antonia Vella | do. . | 40 | 9 | .. | | 740 | Salivated. |
| | Maria Cammilleri . | do. . | 36 | .. | | 5 | 120 | Lived eight hours in the hospital. |
| | Grazia Bartolo . | Pieta . | 70 | .. | | 5 | 48 | Lived twelve hours in the hospital. |
| | Guiseppe Aquilina | Valletta . | 54 | 9 | .. | | 460 | |
| | Maria Cauchi . | do. . | 40 | 11 | .. | | 660 | Salivated. |
| | Giuseppe Callas . | do. . | 30 | .. | | 4 | .. | Lived three hours in the hospital. |
| | Filippo Borg . | do. . | 70 | 6 | .. | | 540 | |
| | John Macleanen . | do. . | 45 | 6 | .. | | 250 | |
| | Giovanni Azopardi . | C. Tarscien . | 50 | .. | | 4 | .. | Lived six hours in the hospital. |
| | Giuseppa Grech . | Forzato . | 60 | .. | | 5 | .. | Refused all medicine. |
| | Andria Adamo . | Valletta . | 25 | .. | | 5 | 160 | Lived seven hours in the hospital. |
| | Salvatore Tanti . | do. . | 51 | 6 | .. | | 320 | |
| | Giuseppe Tagliana . | Forzato . | 55 | .. | | 4 | .. | Refused medicines. |
| | Giovanni Dalli . | C. Tarscien . | 70 | 9 | .. | | 70 | |
| 5 | Caterina Genois . | Valletta . | 64 | .. | | 6 | 120 | Died in the reaction. |
| | Giuseppe Vella . | do. . | 14 | 9 | .. | | 160 | |
| | Maria Attard . | Pieta . | 27 | 9 | .. | | .. | |
| | Tomaso Debono . | Valletta . | 17 | .. | | 6 | 30 | Lived seventeen hours in the hospital. |
| | Andrea Barbara . | do. . | 28 | 9 | .. | | 700 | |
| | Angelo Baldachino | Vittoriosa . | 10 | 9 | .. | | 280 | |
| | Vincenzo Susi . | Valletta . | 8 | .. | | 5 | 36 | Lived nine hours in the hospital. |
| | Felice Pace . | do. . | 18 | 9 | .. | | 130 | |
| | Agostino Micallef | do. . | 11 | 10 | .. | | 240 | |

M

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 5 | Maria Aquilina . | Valletta . | 25 | July 9 | .. | 260 | Salivated. |
| | Liberata Said . | Floriana . | 75 | .. | July 6 | .. | Refused all medicines. |
| | Vittoria Micallef . | Valletta . | 50 | .. | 6 | 200 | Lived nine hours in the hospital. |
| | Teresa Chetcuti . | do. . | 36 | 19 | .. | 140 | |
| | Concetta Spiteri . | do. . | 45 | .. | 5 | .. | Lived a few minutes in the hospital. |
| | Teresa Ciappara . | Pieta . | 75 | .. | 8 | 180 | Died in the reaction. |
| | Caterina Debono . | Valletta . | 79 | .. | 6 | .. | Entered with symptoms of apoplexy. |
| | Ignazio Vella . | do. . | 29 | .. | 5 | 40 | Lived seven hours in the hospital. |
| July 6 | Giuseppe Micallef . | Valletta . | 25 | .. | 6 | 140 | Lived eight hours in the hospital. |
| | Rosa Cauchi . . | do. . | 27 | .. | 6 | 60 | Lived five hours in the hospital. |
| | Lucia Valla . . | Floriana . | 45 | 20 | .. | 520 | Salivated. |
| | Giuseppe Sammut . | do. . | 54 | .. | 6 | 80 | Refused to continue the medicines, and lived seventeen hours in the hospital. |
| | James Pearce. . | Scho. James | 18 | 7 | .. | 320 | |
| | Lorenzo Gauci . | Valletta . | 30 | .. | 6 | 40 | Lived four hours in the hospital. |
| | N. N. (Insane) . | do. . | .. | .. | 6 | .. | |
| | Teresh Spiteri . | do. . | 50 | .. | .. | .. | Lost the notes. |
| | Antonio Portelli . | do. . | 26 | 20 | .. | 500 | Salivated. |
| | Giorgio Ciappara . | Pieta . | 60 | .. | 9 | 200 | Died in the reaction. |
| | Angelo Cilia . . | Valletta . | 58 | .. | 6 | 20 | Refused to continue the medicine. |
| | Fillippo Borg . . | do. . | 70 | 6 | .. | .. | The notes lost. |
| | Nicola Gafan . . | do. . | 45 | 7 | .. | 100 | |
| | Maria Abela . . | do. . | 52 | .. | 6 | .. | Lived an hour in the hospital. |
| | Giuseppe Borg . | do. . | 23 | .. | 6 | 100 | Lived eleven hours in the hospital. |
| | Angela Gambin . | do. . | 28 | .. | 10 | 120 | Died in consequence of abortion. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Constanza Zueref . | do. . | 16 | | 6 | .. | | 460 | |
| | Rosa Carnana . | do. . | 60 | .. | | | 7 | 80 | Refused to continue the medicine. |
| | Carmela Abela . | C. Zabbac . | 52 | .. | | | 7 | 40 | Refused to continue the medicines. |
| | Vincenzo Camilleei . | Forzato . | 24 | | 9 | .. | | 580 | |
| | Carmelo Misfud . | Valletta . | 22 | .. | | | 7 | 40 | Lived rather less than four hours in the hospital. |
| | Andrea Gatt . . | Forzato . | 55 | .. | | | 11 | 360 | Died in the reaction, which took the form of typhus. |
| | Paolo Borg . . | Valletta . | 60 | .. | | | 11 | 260 | Died in the reaction. |
| | Marg. Camizuli | S. Giuseppe . | 28 | | 01 | .. | | 960 | This person took calomel in doses of two scruples at a time. |
| 7 | Benigno Grech . | Valletta . | 19 | .. | | | 10 | 560 | |
| | Giuseppe Mercicca . | do. . | 22 | | 9 | .. | | 340 | |
| | Petronel Sceberas . | C. Luca . | 35 | .. | | | 7 | 40 | Lived one hour in the hospital. |
| | Frederico Gibiotti . | Valletta . | 13 | | 9 | .. | | 340 | |
| | Giuseppe Zammut , | C. Zurrico . | 40 | | 9 | .. | | 340 | |
| | Vincenzo Vasssallo | Notabile . | 40 | .. | | | 7 | 40 | Lived two hours in the hospital. |
| | Michele Zammet . | C. Curmi . | 45 | 9 | | | 8 | 180 | Lived nine hours in the hospital. |
| | Emmanuele Agius . | Forzato . | 50 | .. | | | 8 | 100 | Lived eight hours in the hospital. |
| | Michele Cashia . | Valletta . | 77 | .. | | | 8 | 60 | Lived four hours in the hospital. |
| | Tommaso Sceberas . | C. Luca . | 9 | | 21 | .. | | 60 | |
| | Maria Sceberas . | do. . | 6 | | 21 | .. | | .. | |
| | Maria Desavcris . | Valletta . | 40 | .. | | | 8 | 140 | Lived seven hours in the hospital. |
| | Maria Zahra . . | do. . | 50 | | 11 | .. | | 240 | |
| | Angela Sultana . | do. . | 60 | | 9 | .. | | 48 | |
| | Anna Benedette . | do. . | 30 | | 9 | .. | | 300 | |
| | Giovanni Sceberas . | do. . | 62 | .. | | | 8 | .. | Lived a few hours in the hospital. |
| 7 | Concetta Spiteri . | Fabetta . | 26 | .. | | | 9 | 200 | Ill seven days before she was received into the hospital. |
| 8 | Giuseppe Xicluna . | Senglea . | 86 | .. | | | 8 | 100 | Lived five hours in the hospital. |
| | Giovanni Galea . | Valletta . | 66 | .. | | | 9 | 180 | |
| | Teresa Grima . . | Floriana . | 60 | .. | | | 12 | .. | Entered the hospital in a state of reaction. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 8 | Maria Cilia . . | Valletta . | 40 | July | July 9 | .. | Lived seven hours in the hospital, and refused medicine. |
| | Nicola Falyon . . | do. . | 48 | 15 | .. | 620 | |
| | Antonio Tonna . | C. Tarscien . | 81 | .. | .. | .. | Note lost. |
| | Antonio Borg . . | Curmi . | 27 | .. | 10 | 120 | Died in the reaction. |
| | Giovanni Bonanno . | Valletta . | 30 | 10 | .. | 620 | |
| | Giuseppe Muscat . | Floriana . | 56 | 11 | .. | .. | Mislaid the note. |
| | Anna Borg . . | Valletta . | 75 | .. | 11 | .. | Refused all sorts of medicine. |
| | Carmela Borg . . | do. . | 22 | .. | 8 | .. | Lived one hour in the hospital. |
| | Maria Carioto . . | do. . | 19 | .. | .. | .. | Note lost. |
| | Rosa Borg . . | do. . | 33 | .. | 9 | 20 | Refused medicine. |
| | Felice Xiciuna . | Floriana . | 62 | .. | 9 | .. | Died a few hours after entering the hospital. |
| | Matteo Camelleri . | Valletta . | 42 | 10 | .. | 206 | |
| | Giuseppe Muscat . | Floriana . | 65 | .. | 8 | 140 | Died in a state of rigor. |
| | Giovanni Vella . | do. . | 27 | 11 | 8 | 152 | |
| | Rafaele Degeovanni . | do. . | 16 | 9 | .. | 260 | |
| | Dammiano Catania . | Pieta . | 30 | 18 | .. | 320 | |
| | Antonio Gatt . . | do. . | 56 | 10 | .. | 200 | |
| | Ant. Franceschini . | Forzato . | 30 | 12 | .. | 700 | |
| | Rosa Buhagiar . | Valletta . | 55 | 14 | .. | 300 | Died in the reaction. |
| 9 | Albino Gauri . | do. . | 64 | .. | 9 | .. | Died a few minutes after being received. |
| | Francesco Bonnett . | do. . | 26 | 17 | .. | 200 | Salivated. |
| | Giovan. Galleja . | do. . | 49 | .. | 9 | 80 | Lived three hours in the hospital. |
| | Caterina Zammit . | C. Luca . | 28 | .. | 9 | .. | Died a short time after his reception in the hospital. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Maria Hili . . | Floriana . | 33 | .. | | 12 | 300 | Recovered, relapsed, & died in three hours. |
| | Salvatore Gatt . | do. . | 12 | | 10 | .. | 100 | |
| | Concel. Azziopardi . | Valletta . | 24 | | 9 | .. | 120 | |
| | Grazia Hill . . | S. Giuseppe . | 46 | .. | | 9 | 100 | Lived seven hours in the hospital. |
| | Maria Messina . . | Valletta . | 23 | .. | | 9 | 40 | Lived six hours in the hospital. |
| | Innocenza Ellul . | do. . | 45 | .. | | 9 | 80 | Refused to continue the medicine. |
| | Antonia Spiteri . | do. . | 34 | | 27 | .. | 280 | |
| | Nicola Testa . . | Pieta . | 74 | .. | | 10 | .. | Note lost. |
| | Francesco Roll . | Valletta . | 32 | .. | | 9 | .. | Lived half-an-hour in the hospital. |
| | Lorenzo Buttegug . | do. . | 30 | .. | | 9 | .. | Refused medicine. |
| | Aloisia Schembri . | Forzato . | 21 | .. | | 19 | 100 | Refused to continue medicine. |
| | Mariana Micallef . | Valletta . | 28 | | 31 | .. | 130 | Removed here from the civil hospital with diseased liver. |
| | Antonia Veila . . | Pieta . . | 61 | | 15 | .. | .. | Note lost. |
| 8 | Maria Attard . . | Floriana . | 49 | .. | | 11 | .. | Refused medicine. |
| | Maria Cassar . . | Valletta . | 70 | .. | | 11 | .. | Refused medicine. |
| 10 | Benigno Said . . | do. . | 35 | .. | | 10 | 20 | Refused to continue the medicine. |
| | Antonio Xucref . | do. . | 68 | .. | | .. | 100 | |
| | Gaetano Zammit . | do. . | 75 | .. | | 11 | 320 | Died in the reaction. |
| | Nicola Mercieca . | do. . | 54 | .. | | 12 | 300 | Died in a state of intense coldness. |
| | Francesco Abyer . | Forzato . | 18 | .. | | .. | .. | Note lost, |
| | Angela Saliba . . | Valletta . | 12 | .. | | 12 | .. | Received in a state of reaction, with symptoms of disease of the brain. |
| | Maria Galea . . | do. . | 60 | .. | | 10 | .. | Lived one hour in the hospital. |
| | Vincenzo Attard . | do. . | 65 | .. | | 10 | 100 | Died in a state of great coldness seven hours after his admission. |
| | Vincenzo Calleja . | do. . | 30 | | 12 | .. | .. | |
| | Concetta Said . . | do. . | 3 | .. | | 10 | 320 | Note lost. |
| | Felecé Galea . . | Floriana . | 60 | | 15 | .. | 400 | |
| | Teresa Spiteri . . | Valletta . | 80 | .. | | 10 | .. | Lived two hours in the hospital. |
| | Placido Magro . . | C. Curmi . | 55 | .. | | 14 | 300 | Recovered after the first attack, relapsed, and died in three hours. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grs. | |
| July 10 | Marcella Vella | Valletta | 22 | July 13 | July | 260 | |
| | Emmanuele Schembri | do. | 28 | 15 | .. | 360 | |
| | Giuseppe Abela | do. | 43 | 14 | .. | 120 | |
| | Giovanni Camilleri | do. | 22 | 13 | .. | 18 | Salivated. |
| | Lorenzo Falzoli | Forzato | 18 | .. | 11 | 80 | Lived six hours in the hospital. |
| | Grazia Teuma | Floriana | 60 | 26 | .. | 400 | |
| | Maria Cini | do. | 12 | .. | 10 | 10 | Lived but few minutes in the hospital. |
| | Carlo Bugeja | do. | 60 | .. | 11 | 100 | Died in the reaction. |
| | Maria Delirata | do. | 27 | 15 | .. | 20 | |
| | Francesco Bartolo | Forzato | 23 | 17 | .. | 360 | |
| 11 | Salvatore Bartolo | Valletta | 52 | 16 | .. | 280 | |
| | Maddelina Mufsud | do. | 22 | .. | 14 | 20 | Refused medicine. |
| | Giuseppe Fenech | do. | 50 | .. | 12 | .. | Refused medicine. |
| | Antonio (Insane) | do. | .. | .. | 11 | .. | Lived but few minutes after having been received. |
| | Giuseppe Vella | Babbato | 29 | .. | 11 | .. | Lived a few minutes after being received into the hospital. |
| | Bernardo Gripo | Floriana | 46 | .. | 12 | 200 | Died in a state of rigor eight hours after being brought in. |
| | Rosario Ellul | do. | 50 | .. | 11 | .. | Died a short time after being received into the hospital. |
| | Maria Xerri | Valletta | 19 | 16 | .. | 40 | |
| | Giuseppe Mifsud | do. | 24 | .. | 11 | .. | Lived a few minutes after being received into the hospital. |
| | Pietro Azzopardi | do. | 20 | 15 | .. | 140 | |
| | Maria Castaldo | do. | 50 | 16 | .. | 460 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Saverio Tonna | do. | 39 | .. | .. | .. | 100 | |
| | Georgio Elia | do. | 58 | .. | .. | 12 | .. | Refused medicine. |
| | Vincenzo Caruana | Floriana | 30 | 18 | .. | | 220 | |
| | Teresa Muscat | Valletta | 12 | 13 | .. | | .. | |
| | Antonia Missud | do. | 43 | 17 | .. | | 340 | |
| | Annunziata Aguilina | do. | 33 | 11 | .. | | 20 | |
| | Eugenia Volpi | Pieta | 36 | .. | .. | | .. | Note lost. |
| | Paolo Zammit | Valletta | 19 | 19 | .. | | 920 | |
| | N. N. (Insane) | do. | .. | .. | | 11 | .. | Died a few minutes after he was received into the hospital. |
| | Francesca Gallea | S. Genteppe | 18 | .. | | 12 | 30 | Refused to continue the medicines. |
| | Carmelo Bonano | Valletta | 31 | .. | | 11 | 20 | Lived one hour in the hospital. |
| | Rosa Cortes | C. Curmi | 29 | .. | | 14 | 320 | The reaction took the form of typhus. |
| | Anna Schenbri | Valletta | 48 | .. | | 12 | 20 | Died in a state of rigor seven hours after he was received. |
| | Vittoral Portelli | do. | 19 | 17 | .. | | 540 | |
| | Antonio Gallea | do. | 15 | .. | | 13 | 80 | Died in a state of rigor seven hours after he was admitted. |
| 12 | Francesco Zerrueto | R. M. F. Re | 60 | 15 | .. | | 220 | |
| | Maria Galea | Valletta | 34 | 25 | .. | | 300 | |
| | Maria Muscat | do. | 60 | 15 | .. | | 160 | |
| | Teresa Spireri | do. | 12 | .. | .. | | 120 | |
| | Maria Barbara | Floriana | 30 | .. | | 12 | .. | Refused all medicines. |
| | Marianna Barbara | do. | 5 | 14 | .. | | 40 | |
| | Rosa Baccarizza | Valletta | 50 | .. | | 17 | 420 | Died in a relapse caused by an error in diet. |
| | Caterina Gaucci | do. | 10 | 13 | .. | | 80 | |
| | Vincenza Arpa | do. | 67 | 20 | .. | | 720 | |
| | Maria Zerafa | do. | 22 | 15 | .. | | 340 | |
| | Andrea D'Angulo | do. | 8 | .. | | 13 | 60 | Lived five hours in the hospital, and died in the cold stage. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 12 | Marianna Zarafa . | Valletta . | 45 | July 13 | July | 160 | |
| | Luigi Callega . . | do. . | 9 | 14 | .. | 60 | |
| | Vincenzo Mazzi . | Floriana . | 70 | .. | .. | 360 | |
| | Roza Zammet . | Valletta . | 60 | .. | .. | 260 | |
| | Maria Grech . . | do. . | 62 | .. | 13 | 60 | Lived nine hours in the hospital, and died in a state of rigor. |
| | Giuseppe Gufan . | do. . | 40 | 15 | .. | 480 | Took cold-baths three times. |
| | Andria Xichma . | do. . | 45 | .. | 13 | 200 | Lived five hours, and died in the cold stage. |
| | Francesco Finri . | Floriana . | 84 | .. | 13 | 20 | Entered the hospital in a dying state, and lived an hour. |
| | Agostino Portelli . | Valletta . | 45 | .. | .. | .. | Note lost. |
| | Cattarina Genni . | do. . | 11 | .. | .. | .. | Note lost. |
| | Giuseppe Pulis . | Floriana . | 45 | .. | 13 | .. | Refused to take medicine. |
| | Francesco Caldon . | Valletta . | 50 | .. | 13 | .. | Died a few minutes after he was received. |
| | N. N. (Insane) . | do. . | .. | .. | 13 | .. | |
| | Agostino Schembri . | do. . | 44 | 17 | .. | 160 | |
| | Angela Fiteni . . | do. . | 33 | .. | 12 | .. | Arrived at the hospital with symptoms of typhus. |
| 13 | Anna Azzopardi . | do. . | 70 | .. | 13 | .. | Lived four hours in the hospital, and refused to take medicines. |
| | Liberata Inguanes . | do. . | 75 | .. | 14 | 100 | Lived seven hours in the hospital, and diod in the cold stage. |
| | Antonio Carnana . | do. . | 30 | .. | 13 | 20 | Lived three hours in the hospital, and died in the cold stage. |
| | Grazia Bugeja . | do. . | 70 | .. | 13 | 160 | Refused to continue the medicine, and died in the cold stage. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Giovanni Aquilina . | Floriana . | 45 | 21 | .. | 1160 | Salivated. |
| Alessandro Attard . | Forzato . | 73 | .. | 15 | 400 | Died in the reaction. |
| Maria Cauchi - . | Pieta . | 40 | 20 | .. | 400 | |
| Angela Spiteri . . | Valletta . | 30 | .. | .. | .. | Note lost. |
| Rosa Anna Spiteri . | do. . | 15 | 26 | .. | 320 | |
| Giovanni Vella . | do. . | 11 | 17 | .. | 80 | |
| Aquilius Miceallet . | do. . | 12 | ?0 | .. | .. | |
| Antonio Franceschini | do. . | 30 | .. | 13 | .. | Died in the cold stage, refused medicine. |
| N. N. (Insane). . | C. Chircop . | .. | .. | 13 | .. | Expired a few moments after being received. |
| Salvatore Mizzi . | R. M. F. Re. | 29 | 15 | .. | 140 | |
| Vittoria Catania . | Valletta . | 47 | .. | 13 | 40 | Lived two hours after being received. |
| Giovanni Micallef . | do. . | 46 | Aug. 1 | .. | .. | Received convalescent. |
| Salvatore Gauri . | do. . | 40 | .. | 17 | 500 | Recovered from the first attack, relapsed and died in three hours |
| Francesco Borg . | Floriana . | 50 | .. | 13 | 20 | Lived an hour in the hospital. |
| Antonio Pace - . | do. . | 50 | .. | 16 | 200 | Died in the reaction. |
| Maria Saliba . . | S. Giuseppe | 40 | .. | 13 | 60 | Lived three hours in the hospital, and died in the cold stage. |
| Maria Agius . . | Valletta . | 42 | .. | 16 | 80 | Refused to continue the medicine. |
| Francesco Zammit . | C. Birchircara | 55 | .. | 13 | .. | A great drinker, lived three hours in the hospital. |
| Maria Xicluna . | Floriana . | 72 | .. | 13 | .. | Lived a few minutes in the hospital. |
| Maria Cassar . | do. . | 70 | .. | 13 | 80 | Lived four hours in the hospital, and died in the cold stage. |
| Francesca Mulict . | Ergostolo | 41 | .. | 14 | .. | Refused medicine, and died in the cold stage. |
| Giuseppe Suda . | Valletta . | 58 | .. | 14 | 300 | Died ten hours after the reaction. |
| Saverio Mizzi . . | R. M. F. Re | 62 | .. | 19 | 560 | Died in the reaction. |
| Carmela Matrenza . | Valletta . | 42 | .. | 13 | .. | Lived but few minutes, |
| Vittoria Arnand . | do. . | 50 | .. | 13 | .. | Lived two hours in the hospital. |
| Servrio Galea . . | do. . | 12 | .. | 14 | 60 | Died in the paroxysm of pain. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains | |
| July 14 | Feluc Busuttil . | Valletta | 75 | July | July 14 | 100 | Lived nine hours in the hospital, and died in the cold stage. |
| | Carlo Saracino . . | do. . | 29 | .. | 22 | 400 | Recovered from the first attack, relapsed, and died in four hours. |
| | Andria Digabliete . | C. Curmi . | 33 | .. | 14 | 200 | Lived ten hours in the hospital, and died in the cold stage. |
| | Rosolia Zammit . | C. Zabbac . | 30 | .. | 18 | 100 | Died in consequence of abortion. |
| | Maria Felice . . | Floriana . | 50 | .. | 15 | 20 | Received in a dying state, not able to take medicine. |
| | Giuseppe Carmizuli . | C. Zurrico . | 30 | 17 | .. | 420 | |
| | Maria Galdies . . | C. Curmi . | 40 | .. | 16 | 200 | Died seven hours after he was received, in the cold stage. |
| | Elena Galea . | Floriana . | 70 | .. | 14 | 20 | Did not continue the calomel, it being scarce. |
| | Mar. Ter Tommani . | Valletta . | 62 | .. | 15 | 40 | Did not continue the calomel, there being a scarcity of it. |
| | Saveria Saliba . . | do. . | 61 | .. | 14 | .. | Lived but a few minutes in the hospital. |
| | Maria Xucref . . | C. Zabbac . | 76 | .. | 17 | 60 | Did not continue the calomel, it being scarce. |
| | Giovanni Montibello | Valletta . | 52 | .. | 14 | 20 | Lived seven hours in the hospital. |
| | Giuseppe Tanti . | Forzato . | 20 | 17 | .. | 120 | Received the fresh calomel and continued to administer it. |
| | Michele Borg . . | Floriana . | 24 | 17 | .. | 840 | Salivated. |
| | Agostino Tonti . | Forzato . | 23 | 17 | .. | 180 | |
| | Giovanni Spitori . | Valletta . | 15 | .. | 14 | .. | Repeated the medicine. |
| | Vincenzo Camilleri . | Forzato . | 24 | 17 | .. | 120 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Liberata Pare . . | Valletta . | 45 | 17 | .. | | 220 | |
| | Caterina Gauci . | C. Curmi . | 80 | .. | | 14 | .. | Died a few minutes after being admitted. |
| | Maria Ghegue. . | Valletta . | 44 | 18 | .. | | 160 | |
| | Antonio Chircop . | do. . | 24 | 16 | .. | | 420 | |
| | Michele Camilleri . | Birchircara . | 21 | .. | | 14 | 200 | Died in the cold stage, four hours after his reception. |
| | SalvatoreVella . | Floriana . | 49 | .. | | 16 | 280 | Died in the cold stage fourteen hours after he was received. |
| 15 | Paolo Abela . . | Valletta . | 60 | 22 | .. | | 320 | |
| | Giuseppe Villa . . | do. . | 72 | .. | | 19 | 20 | Refused to continue the medicine, and died in the cold stage. |
| | Luigi Xucref . . | do. . | 50 | .. | | 15 | 300 | Lived two hours in the hospital, and died in the cold stage. |
| | Giuseppe Mizzi . | do. . | 50 | Aug. 1 | .. | | 900 | |
| | Salvatore Genois . | C. Zabbac . | 15 | July21 | .. | | 180 | Salivated. |
| | Gaetano Borg . . | Valletta . | 21 | 30 | .. | | 660 | |
| | Antonio Ferli . . | Pieta . | 13 | 19 | .. | | 280 | |
| | Antonio Cilia . . | Valletta . | 21 | 17 | .. | | 400 | |
| | Rocco Sultana . . | S. Giuseppe . | 17 | 17 | .. | | 100 | |
| | Vincenzo Vassallo . | Valletta . | 30 | .. | | 16 | 500 | Died in the reaction. |
| | Giorgio Bat Fiorante | Napolitano . | 56 | .. | | 20 | 320 | Died in the reaction. |
| 9 | Grazia Magro . . | C. Zabbac . | 22 | .. | | 20 | 60 | Refused to continue the medicine. |
| | Angelo Schembri . | C. Curmi . | 22 | .. | | 22 | 620 | Died in the reaction. |
| | Caterina Filodavo . | Valletta . | 40 | Aug. 1 | .. | | 140 | |
| | Maria Camilleri . | C. Curmi . | 40 | .. | | 15 | 40 | Lived four hours in the hospital. |
| | Andrea Farrugia . | Forzato . | 44 | July17 | .. | | 160 | |
| | Andrea Chetcuti . | C. Zabbac . | 50 | .. | | 15 | .. | Died four hours after his admission to the hospital. |
| | Fortunato Azzopard. | Pieta . | 50 | .. | | 16 | 240 | Died in the cold stage. |
| 16 | Maria Sapiano . . | Valletta . | 80 | .. | | 19 | 500 | Died in the reaction. |
| | Vincenza Mili . . | do. . | 10 | .. | | 20 | 70 | Refused to continue the medicine. |
| | Filippo Amato . . | R. M. F. Re . | 49 | .. | | 19 | 520 | Recovered, relapsed, and died after four hours. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 16 | Anna Camilleri | Valletta | 82 | July | July 16 | .. | Refused medicine, and lived three hours. |
| | Cristina Camilleri | Floriana | 33 | 16 | .. | 320 | |
| | Maria Vella | Valletta | 40 | .. | 20 | 80 | Refused to continue the medicine. |
| | Saverio Camilleri | do. | 73 | .. | 16 | 200 | Lived eleven hours in the hospital, died in the cold stage. |
| | Vincenza Magro | Napolitano | 39 | 18 | .. | 460 | |
| | Gio. Maria Magnin | C. Curmi | 60 | .. | 16 | 40 | Lived four hours in the hospital. |
| | Grazia Mifsac | Floriana | 65 | .. | 25 | .. | Obstinately refused medicine. |
| | Maria Camilleri | Valletta | 26 | 27 | .. | 320 | |
| | Catarina Borg | Floriana | 57 | .. | 16 | 220 | Lived four hours in the hospital, and died in the cold stage. |
| | Maddalena Zammit | C. Zabbac | 60 | .. | 27 | 160 | Refused to continue the medicine, and died in the cold stage. |
| | Antonio Camilleri | Valletta | 67 | .. | 17 | 400 | Lived twenty-two hours in the hospital and died in the cold stage. |
| | Salvatore Sammut | Forzato | 18 | .. | .. | 160 | |
| | Teresa Camillori | C. Curmi | 15 | .. | 16 | .. | Received in a state of insensibility, and died a few minutes after. |
| | Giuseppe Borg | Floriana | 45 | .. | .. | .. | Note lost. |
| | Francesca Cassar | C. Zabbac | 89 | .. | 19 | 200 | In this case the evacuations were always black; died in the cold stage. |
| | Antonio Zahra | Valletta | 59 | .. | 19 | 500 | The reaction was succeeded by inflammation of the lungs. |
| | Giuseppe Zahra | C. Zurrico | 23 | .. | 20 | 260 | Refused to continue the medicine. |
| | Francesco Borg | C. Curmi | 70 | .. | 17 | 200 | Lived twelve hours in the hospital, and died in the cold stage. |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Feliceta Pare | Valletta | 50 | .. | | 17 | .. | Received in a state of typhoidal reaction. |
| | Rosa Rachia | Floriana | 16 | .. | | 17 | .. | Absolutely refused medicine. |
| | N. N. (Insane) | do. | .. | .. | | 17 | .. | |
| 17 | Francesco Spiteri | Forzato | 35 | | 19 | .. | 340 | |
| | Francesco Pace | do. | 30 | | 23 | .. | 260 | |
| | Maria Miculilf | Valletta | 26 | | 22 | .. | 340 | |
| | Madelina Sesandro | do | 10 | | 25 | .. | 240 | |
| | Pietro Agius | Floriana | 40 | | 30 | .. | 840 | |
| | Michele Ellul | Cospicua | 52 | | 21 | .. | 240 | |
| | Giorgio Xucre | Valletta | 33 | | 20 | .. | 260 | |
| | Carlo Curmi | Ergostolo | 24 | .. | | 19 | .. | Note lost. |
| | Maria Camilleri | Valletta | 65 | .. | | 17 | .. | Lived three hours in the hospital. |
| | Giuseppe Muscat | C. Curmi | 70 | .. | | 17 | 120 | Lived ten hours in the hospital, and died in the cold stage. |
| | Salvatore Carnana | Ergostolo | 30 | | 20 | .. | 240 | |
| | Antonio Tonna | Valletta | 34 | .. | | 23 | 800 | Recovered from cholera; by an error in diet relapsed, and died in three hours. |
| | Andria Farrugia | Ergostolo | 44 | .. | | .. | .. | Note lost. |
| | Marianna Bajdda | Valletta | 49 | | 22 | .. | 220 | |
| | Giuseppe Azzopardi | do. | 65 | | 21 | .. | 500 | |
| | Arrigo Greca | Ergostolo | 76 | .. | | 18 | .. | Obstinately refused medicine. |
| | John Skinner | Sc. Sarah Anne | 23 | | 19 | .. | 160 | |
| | Antonio Spiteri | Valletta | 33 | | 23 | .. | 220 | |
| 18 | Francesca Carnana | do. | 55 | Aug. 1 | | .. | 220 | |
| | Anna Baldaschino | do. | 26 | July25 | | .. | 400 | |
| | Rosa Valda | do. | 40 | .. | | .. | .. | Note lost. |
| | Anna Fenech | do. | 75 | | 26 | .. | 320 | |
| | Anna Darega | do. | 48 | .. | | .. | .. | Note lost. |
| | Petruccio Cremona | do. | 48 | .. | | .. | .. | Note lost. |
| | Giuseppe G. Crimbo | Cospicua | 57 | .. | | .. | .. | Note lost. |
| | Maria Carnana | Valletta | 64 | .. | | 19 | 380 | Died in the cold stage. |
| | Saveria Vella | do. | 28 | | 25 | .. | 380 | |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 18 | Girolamo Cilia . . | Valletta . | 60 | July | July 18 | 200 | Refused to continue the medicines, and died in the cold stage. |
| | Maria Grech . . | do. . | 21 | .. | .. | .. | Note lost. |
| | Charles Baker . . | Sc. Sarah Anne | 36 | 20 | .. | 320 | |
| | Rosario Musinegari . | Napolitano . | 11 | .. | 22 | 500 | Died in the cold stage. |
| | Emmanuele Pare . | Valletta . | 80 | .. | 21 | 300 | Refused to continue the medicine, and died in the cold stage. |
| | Ursola Vella . . | do. . | 45 | 22 | .. | 420 | |
| | Teodoro Filodaro . | do. . | 40 | .. | 23 | .. | Refused to take the medicine, and died in the cold stage. |
| | Maria Spiteri . . | do. . | 31 | 31 | .. | 380 | |
| | Caterina Agius . . | C. Curmi . | 27 | .. | 21 | 300 | Died in the reaction after abortion. |
| | Saverio Mezzi . . | R. M. F. Re | 62 | .. | 18 | .. | Note lost |
| | Annunziata Micallef. | Valletta . | 18 | .. | 19 | 400 | Lived eleven hours in the hospital, and died in the cold stage. |
| | Salvatore Tedesco . | do. . | 53 | .. | .. | .. | Note lost. |
| | Maria Agnes . . | Floriana . | 15 | .. | 21 | 120 | Obstinately refused to continue the medicine. |
| | N. N. (Insane) . . | Valletta . | .. | .. | 18 | .. | |
| | Michele Borg . . | do. | 65 | .. | 19 | 460 | Lived thirteen hours in the hospital, and died in the reaction. |
| | Francesco Zammit . | do. . | 82 | .. | 21 | 160 | Refused to continue medicine. |
| | Anselmo Azzopardi . | R. M. F. Re | 30 | 26 | .. | 1000 | |
| | Giuseppe Montaldo . | Valletta . | 12 | .. | .. | .. | Note lost. |
| | Giuseppe Bonnici . | do. . | 18 | .. | 20 | 300 | Died after abortion in the cold stage. |
| | FerdinandoMazzitelli | do. . | 13 | 22 | .. | 460 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Michele Borg | Floriana | 13 | .. | 23 | 560 | Died in the reaction. |
| | Antonio Muscat | Valletta | 25 | 23 | .. | 940 | |
| | Ignazio Schembri | C. Curmi | 47 | .. | 22 | 100 | Refused to continue the medicine. |
| 19 | Giacomo Maturno | Valletta | 9 | .. | .. | .. | Note lost. |
| | Pubblio Azzopardi | do. | 27 | 24 | .. | 860 | Salivated. |
| | Gioacchino Camilleri | do. | 46 | .. | .. | .. | Note lost. |
| | Ursola Vella | C. Zabbac | 30 | .. | 20 | 200 | Died in the cold stage. |
| | Maria Cauchi | Valletta | 12 | 23 | .. | 240 | |
| | Giovanni Gatt | do. | 48 | .. | 20 | 400 | Lived eight hours in the hospital, and died in the cold stage. |
| | Vincenzo Zammut | R. M. F. Re | 32 | 23 | .. | 520 | |
| | Brigida Xerri | Valletta | 34 | .. | 25 | 40 | Died in the reaction. |
| 20 | Leonardo Darmanin | do. | 20 | 26 | .. | 420 | Salivated. |
| | Paolo Siberras | do. | 31 | .. | 20 | 220 | Lived ten hours in the hospital, died in the cold stage. |
| | Carmela Zarb | Floriana | 50 | .. | 24 | 260 | Died in the reaction. |
| | Lorenzo Cullus | C. Zabbac | 37 | .. | 23 | 100 | Refused to continue the medicine. |
| | Rosa Cauchi | Valletta | 9 | 23 | .. | 180 | |
| | Maria Sultana | Pieta | 60 | .. | 21 | 200 | Died in the reaction. |
| | Vincenzo Camiller | Ergostolo | 24 | 31 | .. | 160 | |
| | Giuseppe Damato | Valletta | 30 | 27 | .. | 460 | Salivated. |
| | Giuseppe Galla | do. | 7 | 29 | .. | 180 | |
| | Giuseppe Aquelina | do. | 31 | .. | 20 | 20 | Lived five hours in the hospital, died in the cold stage, and refused to continue the medicine. |
| | Salvatore Bajuda | Cospicua | 30 | .. | 21 | 700 | Died by the relapse caused by errors in diet. |
| | John King | Sc. Sarah Anne | 22 | .. | 26 | 400 | Died in the reaction. |
| | Paolo Parisi | Cospicua | 33 | .. | 21 | 440 | Died in the cold stage. |
| | Catarina Pace | Valletta | 40 | .. | 21 | 80 | Died six hours after being received, in the cold stage. |
| | Maria Dagabriele | do. | 32 | .. | .. 20 | .. | Received in a dying state. |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| July 20 | Giuseppe Stivala | Valletta | 18 | July 29 | July | 440 | Salivated. |
| | Salvatore Mizzi | do. | 28 | 28 | .. | 500 | |
| | Giorgio Muscat | do. | 16 | 23 | .. | 360 | |
| | Ursola Callus | do. | 25 | .. | .. | .. | Note lost. |
| | Paolo Borg | Notabile | 70 | .. | Aug. 1 | 400 | Died in the reaction. |
| | Saverio Borg | Valletta | 19 | 24 | .. | 500 | |
| | Carlo Grech | do. | 87 | .. | 20 | 20 | Lived five hours in the hospital, died in the cold stage. |
| 21 | Giuseppe Seichel | do. | 57 | .. | 22 | 200 | Lived fifteen hours in the hospital, died in the cold stage. |
| | Giovanni Buttigieg | do. | 77 | .. | .. | .. | Note lost. |
| | Anna Dingli | do. | 70 | .. | 29 | .. | Died in the reaction. |
| | Vittoria Galea | do. | 49 | .. | 22 | 100 | Lived twelve hours in the hospital, died in the cold stage. |
| | Calcedonia Calleja | S. Giuseppe | 12 | 23 | .. | 80 | |
| | Carmela Aczopardi | Valletta | 10 | .. | 22 | 40 | Lived six hours in the hospital, and died in the cold stage. |
| | Carmelo Sceberras | R. M. F. Re, | 30 | .. | 22 | 140 | Lived six hours in the hospital, and died in the cold stage. |
| | Catarina Catania | Misida | 33 | .. | 22 | 60 | Lived six hours, and died in the cold stage. |
| | Paolo Spiteri | Valletta | 50 | .. | 22 | 400 | Died eight hours after being received, in the cold stage. |
| 22 | Carlo Borg | do. | 19 | .. | .. | .. | Note lost. |
| | Carmela Sillato | do. | 8 | 24 | .. | 50 | |
| | Gaetano Grappetti | do. | 45 | 24 | .. | 40 | |
| | Teresa Gasparo | do. | 46 | .. | 22 | 100 | Lived thirteen hours in the hospital, and died in the cold stage. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Grazia Sammut | Floriana | 20 | 26 | .. | 220 | |
| | Giuseppe Miftud | Valletta | 85 | .. | 23 | 200 | Died in the cold stage |
| | Anna Agius | Floriana | 48 | .. | 23 | .. | Note lost. |
| | Pietro Vella | Valletta | 13 | 27 | .. | 126 | |
| | Generosa Aquilina | Floriana | 22 | 31 | .. | 680 | Salivated. |
| | Liberata Carnana | Valletta | 24 | .. | .. | .. | Note lost. |
| | Giuseppe Merricca | do. | 22 | .. | .. | .. | Note lost. |
| | Nicola Galia | Floriana | 22 | .. | .. | .. | Note lost |
| | Giuseppe Borg | Valletta | 44 | .. | 23 | 220 | Lived seven hours in the hospital, and died in the cold stage. |
| 23 | Giovanna Marina | Valletta | 60 | : | 26 | 160 | Died in the reaction. |
| | Gabriele Oalleja | Floriana | 74 | .. | 3 | 480 | Recovered from cholera, relapsed, and died in three hours. |
| | Paolo Schrembri | Valletta | 48 | .. | 26 | 600 | Died in the reaction. |
| | Lorenzo Bolonia | do. | 53 | .. | 23 | .. | Refused all remedies. |
| | Catarina Grech | Pieta | 55 | .. | .. | 40 | Lived seven hours in the hospital, refused to continue the medicine. |
| | Francesco Cauchi | R. M. F. Re. | 24 | .. | .. | 20 | Lived three hours in the hospital, died in the cold stage. |
| | Vincenza Bologna | Valletta | 53 | .. | 27 | .. | Refused medicines. |
| | Gio Maria Mangion | do. | 50 | .. | 23 | 60 | Lived five hours in the hospital, and died in the cold stage. |
| | Francesco Vella | do. | 18 | .. | .. | .. | Note lost. |
| | Gio Maria Calafato | do. | 50 | .. | 23 | .. | Lived three hours, not able to take any medicine. |
| | Teresa Mangion | do. | 50 | .. | 25 | .. | Refused medicine. |
| 24 | Consolato Schembri | do. | 25 | .. | .. | .. | Note lost. |
| | Maria Carens | Marsa | 80 | .. | 24 | 460 | Died in the cold stage. |
| | Catarina Galea | Floriana | 48 | .. | .. | .. | Note lost. |
| | Giovanni Micallef | Valletta | 46 | .. | 26 | 400 | Died in the cold stage. |
| | Mariana Psaila | do. | 50 | .. | 24 | 40 | Refused to continue medicine, died in the cold stage. |
| | Consetta Cassac | do. | 24 | 26 | .. | 140 | |

| Date of admission. | Name. | Place from whence they came. | Age. | Date of dismissal. | Date of death. | Quantity of calomel taken. | Remarks. |
|---|---|---|---|---|---|---|---|
| | | | | | | grains. | |
| | Teresa Borg . . | Valletta . | 45 | July | July | 100 | |
| | Maria Paragin . . | do. . | 50 | .. | 26 | 20 | Refused to continue medicine. |
| | Antonio Sarco . . | do. . | 15 | Aug. 2 | .. | 120 | |
| | Alesandro Carnana . | do. . | 21 | .. | 28 | 180 | Died in the reaction. |
| | Saveria Galea . . | Floriana . | 14 | 1 | .. | 80 | |
| | Mariana Muscat . | Valletta . | 34 | July 30 | .. | 120 | |
| July 25 | Maria Farrugia . | do. . | 23 | .. | 31 | 340 | Died in the reaction. |
| 26 | Salvatore Bondi . | R. M. F. Re. . | 25 | Aug. 2 | .. | 300 | |
| 27 | Giuseppe Carmilicri . | Valletta . | 57 | .. | .. | .. | Note lost. |
| 30 | Salvatore Tedesco . | do. . | 53 | .. | 30 | .. | Died, having scarcely reached the hospital. |

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